ATTACHMENT A

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF NEW YORK

UNITED STATES OF AMERICA,

Plaintiff,

v. 10-cr-219-WMS-HKS

TONAWANDA COKE CORPORATION, et al.,

Defendants.

SUPPLEMENTAL DECLARATION OF RICK W. KENNEDY, ESQ.

RICK W. KENNEDY, under penalty of perjury and pursuant to 28 U.S.C. § 1746, declares the following to be true and correct:

1. I am an attorney licensed to practice in the State of New York, and a partner in the firm Hodgson Russ LLP ("Hodgson Russ"). I am admitted to practice before this Court.

2. Hodgson Russ represents defendant Tonawanda Coke Corporation ("Tonawanda Coke") in connection with environmental enforcement and regulatory actions brought by federal and state agencies, including the United State Environmental Protection Agency ("USEPA"), the United States Department of Justice, Environmental Enforcement Section, Environment & Natural Resources Division ("USDOJ"), the New York State Department of Environmental Conservation ("NYSDEC,") and the New York State Attorney General ("NYSAG," and collectively with USEPA, USDOJ, and NYSDEC, the "Agencies").

3. Hodgson Russ also represents Tonawanda Coke and defendant Mark Kamholz ("Kamholz") in pending civil tort litigation alleging personal injuries and property damage.

4. I am aware of the facts and circumstances surrounding the criminal conviction and pre-sentencing submissions of Tonawanda Coke and Kamholz before this Court.

5. I make this declaration in support of Tonawanda Coke's Reply to the Government's Sentencing Memorandum, and in reply to the Government's Response to Defendant Tonawanda Coke's Sentencing Memorandum and its exhibits [Docket No. 246].

6. Specifically, this declaration addresses assertions made in the affidavit of James G. Strickland (incorporated by reference at various places in the government's response memorandum) taking issue with various portions of my prior Declaration, dated September 13, 2013, which was attached as Exhibit 2 to the Sentencing Memorandum on Behalf of Tonawanda Coke Corporation [Docket No. 229] (the "September 13 Declaration").

A. <u>The State Superfund Site Project</u>

7. Paragraph 9 of the Strickland Affidavit characterizes the information set forth in paragraph 19 of the September 13 Declaration as inaccurate and affirmatively asserts that NYSDEC has not reached an agreement on the particulars of the remedial program for the inactive hazardous waste site known as Area 108 (OU3), and that Tonawanda Coke has ordered its consultant to stop all negotiations and work regarding the State Superfund site project. Mr. Strickland's assertions are inconsistent with documented facts.

(a) On December 10, 2010, Tonawanda Coke's environmental consultant, Conestoga-Rovers & Associates ("CRA"), submitted a proposal to NYSDEC for dredging contaminated sediments from the embayment area located at OU3, and removing surface soil and tanks associated with Area 108 (OU3). A copy of that proposal is attached to this Declaration as **Exhibit A**. On July 29, 2011, NYSDEC submitted comments on that proposal. A copy of those comments is attached to this declaration as **Exhibit B**. On September 26, 2011, CRA submitted responses to the Agency's comments. A copy of those responses is attached to this declaration as **Exhibit C**. On Tuesday October 4, 2011, NYSDEC project manager Vivik Nattanami sent an email to James Kay at CRA approving the proposal based on TCC's responses on September 26, 2011. A copy of that electronic approval is attached to this declaration as **Exhibit D**.

(b) Tonawanda Coke never ordered its consultants to stop negotiations or work in connection with the State Superfund site project. In discussions concerning the work at Area 108, TCC's consultant advised NYSDEC that it could not commit to a specific implementation schedule until Tonawanda Coke completed its discussions with USEPA and NYSDEC on a host of other capital and resource intensive projects to be undertaken at the plant. NYSDEC has not provided any objections to finalizing this matter once the outstanding projects are addressed.

8. Paragraphs 10, 11 and 12 of the Strickland Affidavit assert that my description of NYSDEC's decision-making with respect to Areas 109 (OU2) and 110 (OU1) is not correct. In response, I respectfully refer the Court to the Record of Decision issued by NYSDEC with respect to Areas 109 and 110 (OU2 and OU1) in March 2008 (the "Record of Decision"). A copy of that Record of Decision is attached to this Declaration as **Exhibit E**.

(a) In particular, I draw the Court's attention to the statement made under the heading: **Assessment of the Site**, which reads:

> "This site does not present a current or potential threat to public health or the environment."
>
> Declaration Statement – Record of Decision, Tonawanda Coke Corporation Inactive Hazardous Waste Disposal Site, Operable Unit Nos. 1 and 2, Tonawanda, Erie County, New York, Site 915055; page i.

(b) I also respectfully refer the Court to a statement under the heading: **New York State Department of Health Acceptance**, which reads:

> "The New York State Department of Health (NYSDOH) concurs that the remedy selected for this site is protective of human health."
>
> Declaration Statement – Record of Decision, Tonawanda Coke Corporation Inactive Hazardous Waste Disposal Site, Operable Unit Nos. 1 and 2, Tonawanda, Erie County, New York, Site 915055; page ii.

(c) Finally, I respectfully refer the Court to the following statement contained in Section 6: **Summary of the Remediation Goals and Selected Remedy**, which reads:

> Based on the above information, the Department selected *no action* with the provision of Institutional/Engineering Controls has the remedy for OU1 and OU2.
>
> Declaration Statement – Record of Decision, Tonawanda Coke Corporation and Active Hazardous Waste Disposal Site, Operable Unit Nos. 1 and 2, Tonawanda, Erie County, New York, Site 915055; at page 9. (Italics added).

9. Paragraphs 13, 14, 15, 16, 17 and 18 of the Strickland Affidavit assert technical objections to statements set forth in paragraph 20 of the September 13 Declaration.

(a) The findings and conclusions set forth in paragraph 20 of the September 13 Declaration were CRA's findings and conclusions based on the cumulative site-wide investigations concluded as of January 2008.

(b) Whatever narrow technical issues NYSDEC may have with CRA's work today cannot negate this essential fact: the agency relied on CRA's work in issuing the Record of Decision, as reflected in the administrative record appended to the Record of Decision. See **Exhibit E**, Appendix B, B-1.

B. <u>Dusty Pushes at the Facility and Citizen Complaints of Dust, Smoke and Odors</u>

10. Paragraphs 28 through 31 of the Strickland Affidavit point to recent citizen complaints and dusty pushes as an indication that Tonawanda Coke is not acting in a responsible and cooperative manner with the agencies. The opposite is true.

(a) With respect to citizen complaints: NYSDEC Assistant Regional Attorney Teresa Mucha contacts me whenever the agency receives a citizen complaint or the staff observes a potential air emission problem at the Tonawanda Coke facility. I receive those inquiries on a regular and

periodic basis. In every case, the nature of the complaint or concern is communicated immediately to Tonawanda Coke. Tonawanda Coke promptly investigates the complaint. It is extremely difficult in many instances to get a clear and complete answer because of the vague, subjective, undocumented and unsubstantiated nature of the complaints. Nevertheless, Tonawanda Coke undertakes a good faith investigation of the complaint and promptly provides a response, which is transmitted promptly to NYSDEC. If NYSDEC has follow-up questions, those questions are passed along to Tonawanda Coke and answers are promptly given.

(b) With respect to dusty pushes: the problem with dusty pushes was not brought to NYSDEC's attention by citizen complaints. Instead, on behalf of Tonawanda Coke, I called Ms. Mucha and reported the issue to NYSDEC before any complaints had been registered. Tonawanda Coke also explained what it then thought was the likely cause of the problem, and the steps its was taking to address them. Thereafter, NYSDEC wrote a letter, dated September 3, 2013, making eight (8) substantive requests for further information, which Tonawanda Coke timely responded on September 19, 2013, with the exception of identifying employees involved in certain aspects of Tonawanda Coke's business. Included with Tonawanda Coke's response was detailed information regarding the company's operation, as well as 100 pages of laboratory and push reports.

(c) With respect to the visible emissions observation allegedly made by NYSDEC staff on September 24, 2013: The initial notice Tonawanda Coke received was a two sentence e-mail, dated September 27, 2013, from Ms. Mucha alleging opacity exceedances without any further detail or substantiation until the company's review of Mr. Strickland's affidavit on September 30, 2013. In keeping with Tonawanda Coke's regular practice, it investigated the issue, and responded to Ms. Mucha's e-mail the same day. On Friday, October 4, 2013, the company received a formal Notice of Violation, dated October 2, 2013, from NYSDEC regarding the September 24, 2013 allegations, which the company is currently reviewing.

11. Paragraph 34 of the Strickland affidavit notes that certain areas of the Tonawanda Coke facility were inspected on September 11, 2013 because of their association with equipment issues that resulted in cyanide exceedances of the company's Town of Tonawanda ("Town") Industrial User Permit. It also references that these exceedances resulted in the Town issuing an administrative order, dated September 5, 2013, to address both cyanide and mercury exceedances. Certain statements in this paragraph require additional clarification and/or correction.

(a) In 2009, agency representatives notified the company of complaints regarding ammonia-like odors coming from the old ammonia still. The old ammonia still was included in the company's last issued Title V air permit, which is still valid by operation of law. That permit does not

require any type of pollution control equipment to be installed on it. *See* Item 109.2, Air Title V Facility Permit, Permit ID: 9-1464-00113/00031, effective date April 30, 2000. However, as a further demonstration of the company's willingness to cooperate with the agencies, it agreed to fabricate and install a prototype dephlegmator unit to the old ammonia still to condense and separate as much water vapor out of the ammonia as possible to reduce potential ammonia emissions.

(b) After the installation of the dephlegmator, the company began experiencing exceedances of its Industrial User permit cyanide limitation, which it identified as being associated with the operation of that equipment.

(c) During the time of the dephlegmator's operation, USEPA began issuing a series of administrative compliance orders under the Clean Water Act requiring the company to address certain issues, including the cyanide issue. In response to USEPA's actions, Tonawanda Coke worked with its outside consultants to develop a "Plan of Action for Compliance with TCC Sewer Permit," dated September 24, 2010. The report included a series of immediate, intermediate, and long-term actions to come into compliance with its Industrial User permit. The immediate action included shutting off the dephlegmator, as it was the likely cause for the cyanide exceedances. USEPA rejected that recommendation and repeatedly reaffirmed that the unit was not to be shut off. The

intermediate actions included undertaking a series of investigations to better understand the performance of the existing ammonia still. The long-term actions involved the installation of a new ammonia still in close proximity to the boiler house; thereby, minimizing the development of cyanide containing condensate that could contribute to an Industrial User permit exceedance.

(d) The company followed through with the intermediate and long-term actions identified in its September 24, 2010 report, and the new ammonia still was put on-line in June 2012.

(e) Subsequent to the new ammonia still coming on-line, the company has been required by USEPA to conduct cyanide monitoring on a weekly basis, which the company continues to do. Due to a number of variables associated with the start-up of the new ammonia still, as well as certain equipment issues, the company has had five exceedances of its cyanide limitation in the calendar year 2013. In each case, the company has notified the Town and USEPA of the exceedance, and what it believes to be the cause of such exceedance. The company has then taken action to address the diagnosed causes.

(f) In the past year, the Town has not issued any Notices of Violation regarding cyanide exceedances, nor has not it mandated any specific action with regard to cyanide monitoring other than including a reference

in an order associated with mercury exceedances requiring weekly sampling at the Town discharge location.

(g) On September 1, 2012, the Town re-issued to the company Permit # 331 for its discharge to the Town sewer ("Permit # 331"). Included in the permit renewal is a limitation of 1 part per billion of mercury (a very low number), which is to be sampled semi-annually. The prior version of Permit # 331, which was issued on September 1, 2009, did not include a mercury limitation.

(h) Upon receipt of Permit # 331, rather than wait until the first semi-annual sampling date, the company immediately conducted sampling in order to determine whether its wastewater discharge would meet the new mercury limit. It was determined shortly thereafter that mercury in the company's effluent discharge to the Town sewer was higher than the new limit. The company promptly engaged the Town on this issue, and has worked cooperatively with the Town to address the cause of the exceedance, including undertaking additional sampling events.

(i) The Town issued a Notice of Violation, dated January 15, 2013, regarding the company's exceedance of the mercury limitation, and requested that it submit a plan by July 2013 identifying steps going forward to remedy the exceedance issue.

(j) In June 2013, the company responded to the Town's request in the January 15, 2013 Notice of Violation, and submitted a proposed trial to

further investigate, and identify, the cause, and potential remedies to, the exceedance issue. After further dialogue with the Town, the company submitted a plan (the "Mercury Reduction Plan") outlining its proposed solution for investigating, and addressing, the mercury exceedance issue. In response to the submission of the Mercury Reduction Plan, the Town issued an administrative order, dated September 5, 2013 (the "AO"), requiring the company to undertake its proposed actions in the Mercury Reduction Plan. A copy of the AO is attached hereto as Attachment 8.

(k) Item 2 of the AO did include a requirement that the company conduct weekly sampling of cyanide and mercury at the Town's sampling location, but did not require any other action regarding the previously noted cyanide exceedances. The company is in the process of implementing the requirements of the Mercury Reduction Plan.

C. <u>Work Performed under the Administrative Orders Brought by NYSDEC and USEPA</u>

12. Paragraph 40 of the Strickland Affidavit urges the Court to discount the substantial body of work performed by TCC and which TCC has committed to do going forward because that work is ". . . required by federal and/or state environmental laws." That assertion is overly simplistic.

(a) It is true that some of the specific projects undertaken by TCC in connection with administrative orders were expressly required by federal and/or state environmental law or regulation.

(b) However, most of the work consists of upgrading, rehabilitating, modifying or replacing equipment and other installations at the plant, as well as undertaking certain operating, maintenance and monitoring programs, which reflect the agencies' broad interpretations of general regulatory duties under the Clean Air Act and Clean Water Act.

(c) The single largest project is the planned installation of a pushing control system. That requires separate discussion. Specifically, NYSDEC agreed in a consent order in 1981 to grant Tonawanda Coke an exemption from the general regulatory requirement that coke plants have pushing controls. As a condition of that consent order, Tonawanda Coke agreed to certain air emission limits that were more stringent than the then-current regulatory limits. The company has abided by the exemption and its stricter limits for more than 30 years. The exemption has never been invalidated or withdrawn. Tonawanda Coke believes that it is entitled to continue to rely on that exemption. The agencies have advised Tonawanda Coke that they will not extend such an exemption in any future Title V permit regulating the plant. Consequently, rather than litigate the issue of the continuing validity of its exemption, Tonawanda Coke has agreed to install a pushing control system.

Dated: October 7, 2013

Rick W. Kennedy, Esq.

EXHIBIT A

CONESTOGA-ROVERS & ASSOCIATES

651 Colby Drive, Waterloo, Ontario, Canada N2V 1C2
Telephone: 519-884-0510 Facsimile: 519-884-0525
www.CRAworld.com

December 10, 2010 Reference No. 002428

Mr. Vivek Nattanmai
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York
12233-7017

Dear Mr. Nattanmai:

Re: Remedial Action Proposal
Tonawanda Coke Corporation

On behalf of Tonawanda Coke Corporation, Conestoga-Rovers & Associates is submitting this updated Remedial Action Proposal to the New York State Department of Environmental Conservation (NYSDEC). This proposal presents the plan to address the conditions found in the on-Site ditch that traverses Site 108 and the impacted sediment in the embayment of the Niagara River adjacent to the Tonawanda Coke property. The proposed plan incorporates the issues discussed with the NYSDEC at the meeting of April 27, 2010, regarding these two components of the Remedial Action. This proposed plan also incorporates changes to address comments received from the NYSDEC since the initial submittal of this plan (July 8, 2010) and incorporates the plans for other components of the remedy, some of which had already been provided in the March 23, 2010 Confirmatory Sampling Plan Report. In addition, the plan now also takes into consideration work being performed in conjunction with the United States Environmental Protection Agency, to ensure that all work is being performed in a consistent manner and properly scheduled.

The proposed plans for the components of the Remedial Action are provided in the following.

IMPACTED SEDIMENT IN ON-SITE DITCH

During the on-Site investigation performed in 2009, it was confirmed that sediment with SVOC concentrations above 200 ppm are present in the uppermost 6-inches of the on-Site ditch. It was also identified that deeper sediments in the layers down to 18-inches also contain SVOCs. The NYSDEC expressed concern that if these sediments remain, the possibility exists that future erosion of the ditch sediment could recontaminate the Niagara River embayment area that is proposed for clean up. Consequently, the NYSDEC has recommended that the entire on-Site ditch through Site 108 be remediated in some manner to reduce/eliminate this possibility.

Further, the NYSDEC has subsequently requested that all ponded areas also be included in the remediation.

Upon reviewing these requests, it has been determined that the most effective means for addressing this situation will involve the following:

- Within the segments of the on-Site ditch where the flow path is wide and well defined, the vegetation will be cleared and the ditch will be lined with filter fabric (12 ounce/square yard non woven geotextile) followed by the placement of an approximately 12-inch thick layer of 4 to 8-inch size stone.
- Within the segments of the on-Site ditch where the flow path is poorly defined or is of limited hydraulic capacity, a 6 to 12-inch layer of sediment will be removed from the base and sidewalls of the ditch. The excavated base and sidewalls of the ditch will be lined with filter fabric (12 ounce/square yard non woven geotextile). The filter fabric will be covered with an approximately 12-inch thick layer of 4 to 8-inch size stone.
- In areas where the ditch passes through ponded areas, the ditch will be rerouted around the edge of the ponded area. The base and sidewalls of the ditch will be excavated and lined as above with filter fabric and stone. The edge of the ditch abutting the ponded area will be built up above the elevation of the base of the ponded area with the excavated material. The excavated material will be covered with filter fabric and stone and left to act as a retention dike that slowly allows surface water from within the ponded area to filter through the porous wall and enter the ditch flow to the same extent that it did prior to the ditch remediation. By separating the ponded areas from the ditch, it will not be necessary to perform any additional work within the ponds. Further, the ponds will continue to act as settling basins for the storm waters that naturally pass through them, just as occurred prior to the ditch remediation, but with the added benefit that the flow from the ponded areas will be filtered before entering the ditch.

The ditch work will be performed during dry weather flows although Tonawanda Coke's cooling water discharges continuously via the ditch. Consequently, the ditch work will be performed under flowing conditions, except to the extent that any water diversion can be implemented around the working area. As the ditch remediation progresses from upstream to downstream and the individual ponded areas are encountered, the ponds will be left on line as part of the flow system. At each of the downstream areas where the ditch flows through ponded areas, the downstream exits from the ponds will be fitted with straw bales and filter fabric to strain the water. Any sediment disturbed by the upstream excavation operation or during the construction of the new ditch segments around the pond areas, will be retained in the ponded areas. Also where possible, the ditch flow will be temporarily diverted through adjacent wet areas or outlets to minimize the flow through the excavation areas, thereby minimizing the potential for sediment migration.

In order to perform this work, considerable effort will be needed to clear pathways allowing equipment and materials to gain access to the ditch. This will require the use of mechanical vegetation clearing equipment. The pathways will not be grubbed so as to minimize disturbance of soils.

The alignment of the ditch and locations of ponds along its path are presented in Figure 1. A typical ditch cross-section showing the proposed remedy is provided in Figure 2.

EMBAYMENT SEDIMENT REMOVAL

The March 23, 2010 letter to Vivek Nattanmai presented the results of the embayment sampling program that was performed in 2009. The results of the sampling program primarily showed:

- Impacted sediment to a depth of 2.5 feet along the downstream shoreline of the embayment.
- Impacted sediment to a depth of 0.5 feet over areas covered by sample locations 6, 7, and 11. The sediment sampling locations are presented on Figure 3.

In order to address these areas, it is proposed that the sediment along the downstream shoreline of the embayment be excavated to a depth of 2.5 feet. The length of the excavation will extend downstream of sample location 3 to the area where the embayment meets the fast water of the Niagara River. The width of the excavation will be about 25 feet. This area is shown as Area 1 on Figure 3.

For the area beyond the downstream shoreline of the embayment where some elevated SVOCs were present in the shallow portion of the embayment sediment, the upper 6-inches of sediment will be removed. It is planned to use a backhoe with a 63-foot boom (maximum capable reach beyond tracks is 55-feet). This is the longest reach of any backhoe available in the Niagara Falls/Buffalo area. The backhoe will work from the immediate shoreline edge and be able to remove the sediment from all areas within the sample location 6, 7, and 11, out to a distance of 55-feet from shore. The limits of this excavation are shown as Area 2 on Figure 3.

Removal of the noted sediment within these two areas will eliminate the vast majority of the high SVOC concentration sediment and avoids the risks associated with placing heavy equipment in the Niagara River. It is estimated that this sediment removal proposal will result in the excavation of approximately 300 cubic yards of impacted sediment. Based upon the sampling performed, this proposed remedy will remove in excess of 90% of the SVOC chemical mass within the embayment study area. Table 1 presents the calculation of mass removal.

Once removed, the sediment will be deposited in an on-Site area of Site 108. The excavated material will be placed within the excavation area to be created by the surface coal/coke removal action adjacent to the embayment. The sediment will be placed upon a permeable delineation fabric (such as a filter fabric) that will allow the sediment to dewater and also serve as a demarcation liner to keep the sediment separate from the underlying soil. At the conclusion of the sediment removal campaign, the sediment pile will be sampled at five locations and analyzed for SVOCs. The results will be used to determine how the sediment will be disposed. The preference is that the material be allowed to remain on-Site, in a subsurface area in the northeast corner of the Site, as originally proposed.

The excavated area within the embayment will be backfilled with imported quarried sand. While work is ongoing in the embayment, silt fences will be in position along the outer limit of the proposed excavation area. The silt fence will be attached to T-bars or other supports that can be driven into the River bottom to support the fence. The silt fence will be removed at the conclusion of the embayment work.

In order to perform this planned remedial action, it will be necessary to remove some of the existing vegetation along the shoreline to provide access to the shoreline and along haul routes between the shoreline and the temporary stockpile cell. It will also be necessary to obtain access permission from the neighboring wastewater treatment plant property owner. In the event that the property owner is not cooperative, Tonawanda Coke will seek NYSDEC assistance to obtain access permission.

Confirmatory samples for SVOC analyses will be collected from the embayment excavation areas at approximately 50 foot centers to ensure that the sediment with elevated SVOC concentrations have been removed.

COAL / COKE SURFACE REMEDIATION

As presented in the March 23, 2010 Confirmatory Sampling Plan Report, the areal extent of exposed coal/coke in the vicinity of surface soil sampling location SS-1 was confirmed during the October 6, 2009 Site visit. The areal extent is shown on Figure 4. As agreed in the approved Work Plan, the exposed coal/coke will be removed from the area and recycled back into the on-Site coke operations. Any foreign material encountered will be disposed back into the excavation from which it came. The area will be graded and backfilled with imported material.

DEBRIS PILE RMEDIATION

During the October 6, 2009 Site visit, a small pile of debris was found on the edge of the coal/coke surface area. This pile will be recycled back into the on-Site coke operations. The location of the pile is shown on Figure 4.

TANK FARM REMEDIATION

The remnants of the tank farm that remain on Site 108 will be dismantled consistent with the Tank Removal Work Plan that was prepared by Great Lakes Environmental & Safety Consultants Inc. (July 2010) and approved by the USEPA for other tank farms located on the main plant property. A copy of the Tank Removal Work Plan is provided in Attachment A. The Plan includes:

- Inspection
- Testing
- Removal and disposal of contents
- Tank demolition

The Plan will be implemented, as applicable to the specific conditions encountered at the Site 108 tank farm. It is noted that modifications to the Work Plan agreed upon after July 2010 will be incorporated into the Plan. Further specific details on the Site 108 tank farm removal will be provided following completion of the Inspection and Testing phase of the work. Details to be provided include maximizing the recycling of encountered materials, on-Site or POTW treatment of generated wastewaters, premixing of encountered materials in place in preparation for subsequent recycling at the main plant, leaving tank and dike bases in place, and other appropriate modifications to the Work Plan.

SCHEDULE

Tonawanda Coke has been working extensively with the USEPA in making upgrades to the operating facilities on the main plant Site. One of the upgrades to be implemented involves storm water management in the coal storage area and adjacent operating areas. This plan will have an impact on the discharge of storm water from the main operating facility and is located upstream of the ditch and embayment remediations covered in this Plan. Consequently, it is appropriate to await the conclusion of the main plant storm water improvements prior to initiating the Site 108 ditch remediation. This will then be followed by the embayment

remediation. Expectations are that the main plant work will be completed in 2011 which will allow the Site 108 remediation to be completed in 2012.

Similarly, the Site 108 tank farm remediation will be completed once the main plant Site's tank farm removal program is complete and all remediation generated materials from that program have been recycled. The schedule is limited by the amount of material that can be processed through the coke ovens on an ongoing basis. If possible, the Site 108 tank farm removal will be performed in 2011, but may be delayed until 2012. Tank farm work will not be performed during winter months unless a specific benefit is identified.

Should you have any questions or comments concerning this proposal, please do not hesitate to call.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

James Kay

JKK/cb/9
Encl. Figures/Table 1
Attachment A - Tank Removal Work Plan

cc: Rick Kennedy
Mark Kamholz

LEGEND

WETLAND

POND EDGE

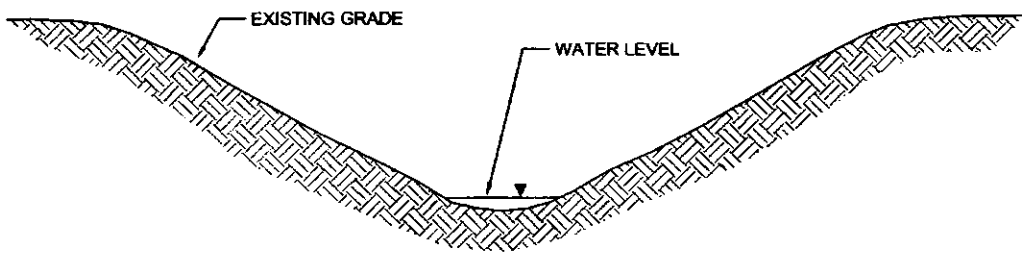
DITCH CENTERLINE/EASEMENT SECTION

figure 1

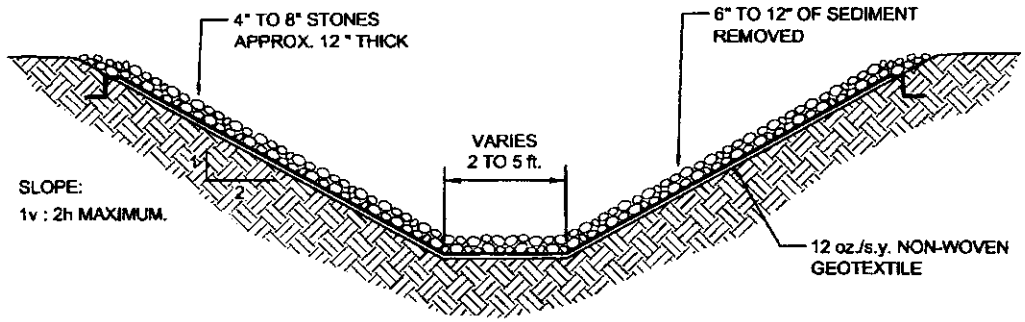
ON-SITE DITCH DELINEATION

Tonawanda Coke

02428-00(NATT009)GN-WA001 NOV 22/2[illegible]



EXISTING CONDITIONS



REMEDIATED CONDITIONS

NOT TO SCALE

figure 2

TYPICAL ON-SITE DITCH CROSS-SECTION

Tonawanda Coke

02428-00(NATT009)GN-WA002 NOV 22/2010

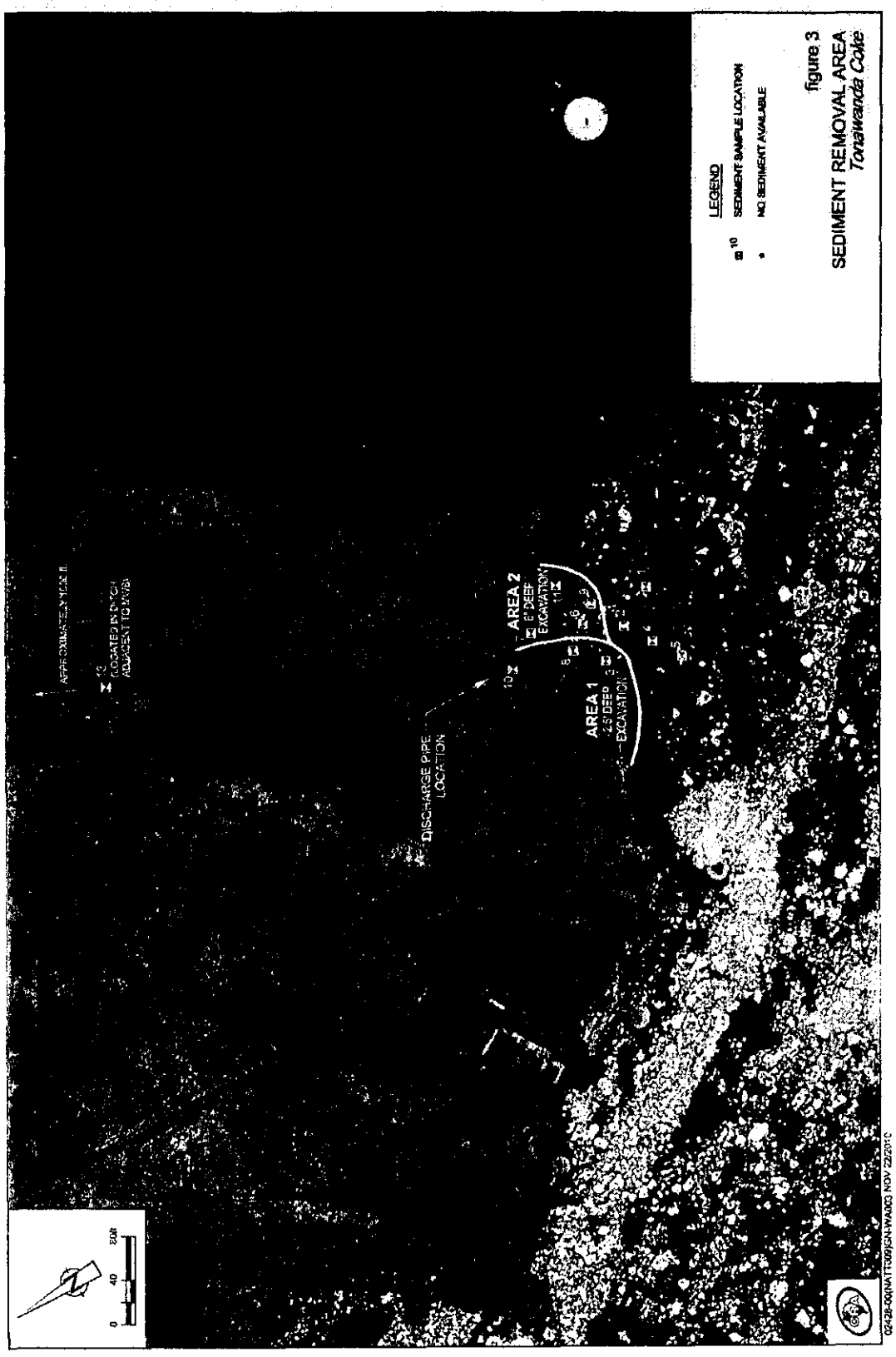


figure 3
SEDIMENT REMOVAL AREA
Tonawanda Coke

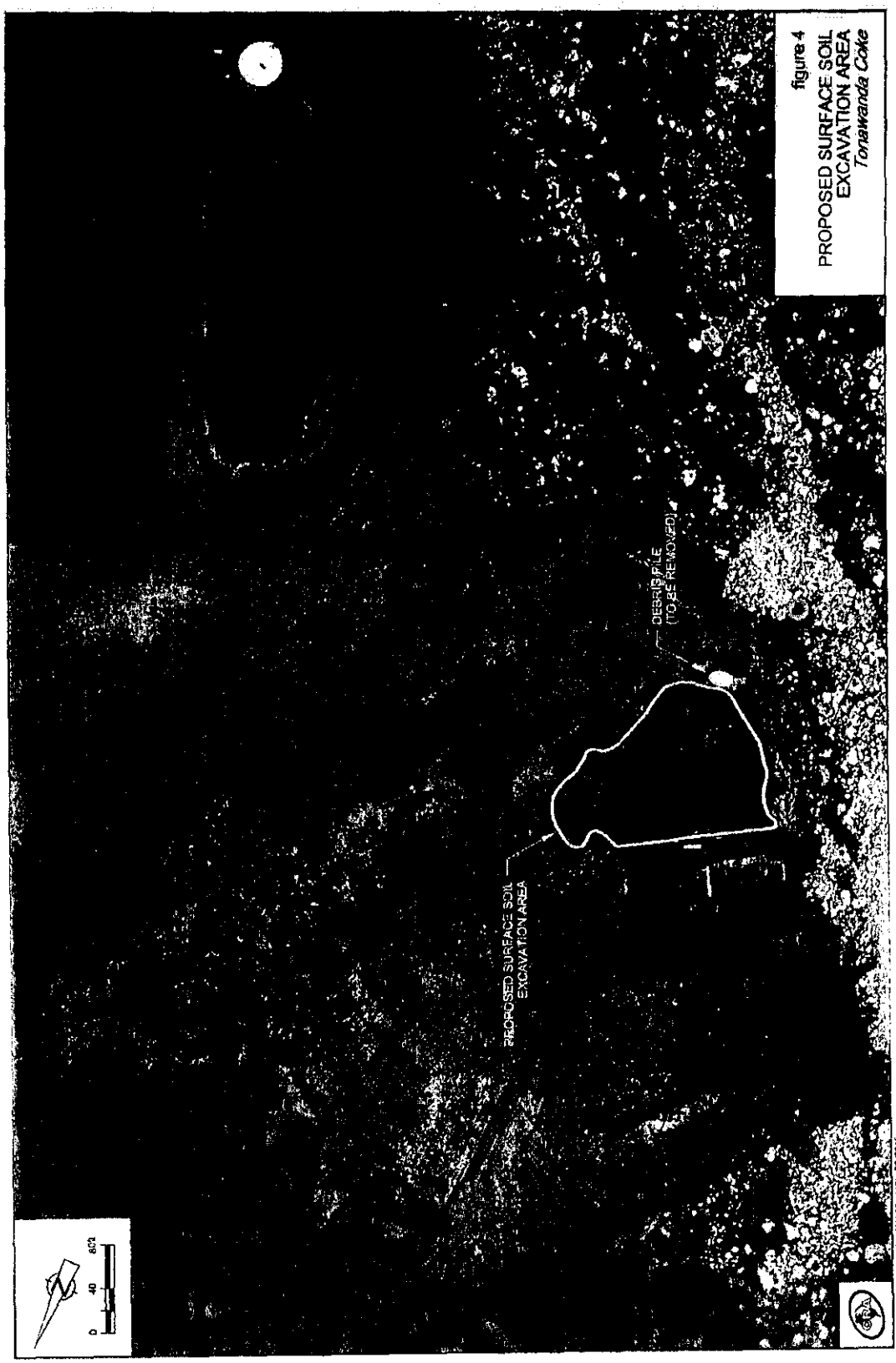

PROPOSED SURFACE SOIL EXCAVATION AREA
DEBRIS PILE (TO BE REMOVED)
0 40 80 Feet
figure 4
PROPOSED SURFACE SOIL EXCAVATION AREA
Tonawanda Coke

TABLE 1

CHEMICAL MASS REMOVAL CALCULATION - SEDIMENT REMEDIATION
TONAWANDA COKE CORPORATION

Sample Area	*Sample Interval*	*Representative Thickness (Feet)*	*Dimensions*	*Area (Sq. Feet)*	*Concentration Total SVOCs (ug/kg)*	*Chemical Mass (Pounds)*	*Chemical Mass in 2.5' Cut Area (Pounds)*	*Chemical Mass in 0.5' Cut Area (Pounds)*	*Chemical Mass in Combined Cut Area (Pounds)*	*Volume of Sediment (Cu. Yds)*	*Volume of Sediment (Cu. Yds)*
SP-1	0 - 0.5'	0.75	40 x 40'	1600	188,200	22.6					
	1 - 1.5'	1		1600	10,300	1.6					
	2 - 2.5'	1.25		1600	700	0.1					
	3.5 - 4'	1		1600	2,200	0.4					
SP-2	0 - 0.5'	0.5	40 x 55'	2200	54,200	6.0					
SP-3	0 - 0.5'	0.75	30 x 30'	900	12,200	0.8	0.8			25	
	1 - 1.5'	1		900	2,644,000	238.0	238			33	
	2 - 2.5'	0.75		900	791,000	53.4	53.4			25	
SP-4	0 - 0.5'	0.75	30 x 30'	900	89,000	6.0					
	1 - 1.5'	1		900	170,000	15.3					
	2 - 2.5'	1.25		900	5,900	0.7					
	3.5 - 4'	1		900	9,200	0.8					
SP-5	0 - 0.5'	0.75	30 x 30'	900	50,500	3.4					
	1 - 1.5'	1		900	16,500	1.5					
	2 - 2.5'	0.75		900	9,800	0.7					
SP-6	0 - 0.5'	0.5	20 x 50'	1000	827,000	41.4		41.4			19
SP-7	0 - 0.5'	0.5	40 x 35'	1400	3,069,000	214.8		214.8			26
SP-8	0 - 0.5'	0.5	20 x 45'	900	41,400	1.9	1.9			17	
SP-9	0 - 0.5'	0.5	20 x 50'	1000	445,000	22.3					
SP-10	0 - 0.5'	0.75	30 x 35'	1050	3,868,000	304.6	304.6			29	
	1 - 1.5'	1		1050	74,000	7.8	7.8			39	
	2 - 2.5'	1.25		1050	663,000	87.0	87			49	
	3.5-4'	1		1050	1,700	0.2					
SP-11	0 - 0.5'	0.5	50 x 35'	1750	795,000	69.6		69.6			32
					TOTALS	1100.6	693.5	325.8	1019.3 92.6%	217	77

ATTACHMENT A

TANK REMOVAL WORK PLAN

PREPARED AT THE REQUEST
OF LEGAL COUNSEL

Tank Removal Work Plan

Prepared for:

Hodgson Russ, LLP
140 Pearl Street, Suite 100
Buffalo, New York 14202

Facility:
Tonawanda Coke Corporation
3875 River Road
Tonawanda, New York 14150

July 2010

Prepared by:

GREAT LAKES ENVIRONMENTAL
& SAFETY CONSULTANTS, INC.

50 Ridge Road
Buffalo, NY 14218
716-827-0700

PREPARED AT THE REQUEST
OF LEGAL COUNSEL

Table of Contents

PREPARED AT THE REQUEST
OF LEGAL COUNSEL

Section 1

GREAT LAKES ENVIRONMENTAL & SAFETY CONSULTANTS

Introduction

1.0 INTRODUCTION

1.1 General

This tank removal work plan has been prepared by Great Lakes Environmental & Safety Consultants, Inc. (Great Lakes) on behalf of Hodgson Russ LLP as outside counsel to Tonawanda Coke Corporation in connection with its facility located at 3785 River Road in Tonawanda, New York (Figure 1 – Appendix A). This work plan delineates the project area and specifies activities to be performed including tank removal, material/equipment decontamination, excavation, and material management.

The location of project is presented in Figure 2 (Appendix A). This work plan presents the planned activities to effectively remove the tank systems and tar-like residual materials in the tanks and project area. In addition, procedures have been developed to protect safety and health and to insure that ground or surface water contamination will not occur as a result of the project activities. The site specific Health & Safety Plan is presented in Appendix E of this work plan.

All work will be conducted in a manner to ensure compliance with 40 CFR Part 262 for management of materials to be managed off-site. This will include at a minimum:

1. Container Management

    a. All containers used will be marked in accordance with 40 CFR 262.34(a)(2) and 40CFR 262.34(a)(3).

    b. All containers will be inspected in accordance with 40 CFR 265.174

2. Accumulation Time Limit (40 CFR 262.34)

    a. Material generated as part of this project that will not be re-used or recycled will not be accumulated (stored following characterizations) on-site for more than 90 days.

3. Contingency Plan 40 CFR 265 Subpart D

    a. To insure compliance with 40 CFR 265, a contingency plan has been developed for the project and is included in Appendix F of this plan. The contingency plan is designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.

4. Personnel Training 40 CFR 265.16

   a. With the exception of Mr. Robert Kolvek – VP of Operation (signatory for all waste manifests) of Tonawanda Coke, all personnel associated with this project will be a third party. All personnel associated with this project will successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of 40 CFR 265.

1.2 Purpose and Organization of Report

This report presents the general design and implementation requirements for the tank removal and associated remedial activities in the area of concern and has been organized into the following sections:

- Section 1 - Introduction
- Section 2 - Tank Removal & Associated Remedial Activities
- Section 3 - Material Management
- Section 4 - Summary Report

PREPARED AT THE REQUEST
OF LEGAL COUNSEL

Section 2

GREAT LAKES ENVIRONMENTAL & SAFETY CONSULTANTS, INC.

Tank Removal & Associated Remedial Activities

2.0 TANK REMOVAL & ASSOCIATED REMEDIAL ACTIVITES

2.1 General

This section presents the activities associated with the tank removal project. The project includes the removal of the contents of four aboveground storage tank systems, removing the tank systems, and the excavation and management of residual tar-like materials in the area of the tank systems. The project will be performed by a qualified contractor and include at a minimum the following activities. A detailed description of each activity follows:

- Site Control;
- Mobilization;
- Temporary soil erosion and stormwater controls;
- Material Staging;
- Storage tank(s) cleaning/removal;
- Excavation of residual tar-like materials;
- Decontamination procedures;
- Field documentation; and
- Worker Contamination Prevention.

2.2 Site Control

Prior to mobilization on site, the project area will be made secure from unhindered and unlimited access by unauthorized personnel. This will be accomplished by the installation of appropriate barriers (i.e., barrier tape, concrete barriers, fencing, cones, rope, etc.). The contractor will provide and maintain security and personnel identification at all times during the project. Only authorized vehicles will be allowed in the project area.

2.3 Mobilization

Excavation equipment and materials, including a loader, excavator, dump truck, etc., required for tank cleaning, tank removal, and excavation activities will be mobilized and staged at the site in the vicinity of the project area. Additionally, the contractor will construct a decontamination facility and generated materials storage area prior to start of any tank removal activities. As part of the mobilization, the contractor will obtain a utility clearance for the site as appropriate. If determined necessary, the contractor will mobilize a field trailer to the site for use as a field office by the on-site personnel. The field trailer, if deemed necessary, will be staged at the site

prior to the start of the project activities. In addition, the contractor will arrange for utility connections to the trailer (i.e., telephone, electrical, etc.) and obtain any permits, as appropriate.

2.4 Temporary Soil Erosion and Stormwater Controls

Prior to the start of the tank removal activities, temporary erosion control and stormwater management structures will be installed at the site to control surface-water run-on and to minimize the potential for erosion and migration of tank contents and other residual tar-like materials during project activities. Soil erosion and storm-water run-off structures will be installed, operated, and inspected in accordance with "New York Guidelines for Urban Erosion and Sediment Control". Storm-water and erosion controls will include the following:

- Silt fence and hay bales around excavation areas;
- Temporary storm-water diversion ditches for the control of surface-water run-off from upgradiant areas onto the project area;
- Temporary check dams and diversion structures/equipment to divert surface-water flow around the project area of concern; and
- Sedimentation control structures around the decontamination and material storage areas.

Silt fence, as appropriate, will be installed along the perimeter of the project area. The silt fence will be anchored a minimum of six inches into the ground and staked every ten feet. Hay bales will be used in conjunction with silt fence along low lying areas of the excavation, staging, and decontamination areas that are expected to receive a greater amount of run-off. The hay bales will be installed immediately adjacent to a three-foot high silt fence. The hay bales will be secured to the ground with stakes or equivalent. Inspection and proper maintenance of the controls will be performed as a component of site maintenance during project activities.

A temporary storm-water diversion ditch will be installed as appropriate to divert run-off from up-gradient areas. The diversion ditch will be constructed above the area to be excavated and will direct flow around the project area. In addition, diversion ditches will be installed as appropriate to divert run-off around the decontamination and material storage areas.

2.5 Material Staging (materials intended for off-site management)

A material staging area will be constructed for the temporary storage of materials to be managed (i.e., scrapped, salvaged, off-site disposal) as a result of the project activities. In particular, the following materials will be staged separately:

- Uncontaminated metal;
- Contaminated metal;

- Contaminated debris (i.e., brick, vegetation, etc.).

The material staging areas will be constructed in the vicinity of the project area. The staged materials (if determined to be contaminated) will be covered at the end of the work day and during precipitation events. The covered material will be secured during inclement weather and during periods of inactivity. Temporary erosion and stormwater controls will utilized as described above to limit coal tar run-off. Contaminated materials may be placed in stockpiles, trucks, or disposal containers (i.e., roll-offs, intermodal, etc.) as follows.

2.5.1 Generated Materials

The contractor will prepare and maintain generated materials (i.e., excavated materials, tanks/piping, etc.) as follows:

1. Preparation of Storage Areas

   - The area will be graded to provide positive drainage away from intended storage locations.
   - All stones, roots, debris and other objects that may puncture polyethylene (PE) ground protection will be removed.
   - The ground surface where material will be staged will be covered with a minimum of 1 layer of 0.15 millimeter (6-mil) polyethylene sheeting or equivalent material. All seams will be overlapped and sealed to prevent the leaching of contaminants.

2. Storage Area Protection

   - At the end of each work day, contaminated materials will be completely covered with a minimum of 1 layer of 0.15 millimeter (6-mil) polyethylene sheeting, or an equivalent material. All seams will be overlapped and sealed to prevent the leaching of contaminants.
   - Material covers will be weighted or secured by appropriate means to prevent tearing or removal by weather conditions.

3. Maintenance

   - Material covers, site grading, signing and security measures shall be properly maintained for the duration of storage. Damaged covers and other protections will be repaired or replaced as necessary.

2.5.2 Material Containers & Transportation

The contractor will prepare and maintain trucks and disposal containers as follows:

- The interior of truck-beds and disposal containers will be lined with 1 layer of 0.15 millimeter (6-mil) polyethylene sheeting, or an equivalent material. All seams shall be overlapped and sealed to prevent the leaching of contaminants.
- At the end of each work day, trucks and disposal containers storing material will be completely covered with waterproof tarpaulins, or hard cover tops. Tarpaulins will be placed over the top of the truck bed or container (rather than over the material inside) and shall extend over the sides to prevent water accumulation and the evaporation of contaminants.
- Tarpaulins will be weighted or secured by appropriate means to prevent tearing or removal by climatic conditions.
- Trucks and disposal containers will be labeled, signed, fenced or otherwise secured (as needed) at the end of each work day.
- Trucks, disposal containers and tarpaulins shall be properly maintained for the duration of material storage.
- Damaged tarpaulins or disposal containers shall be repaired or replaced by the contractor within 24 hours after notification. If this work is not satisfactorily completed within 24 hours, no further material storage shall be allowed until such work is completed.

2.6 Storage Tank Cleaning/removal

Prior to removal of the tank systems, all piping and ancillary equipment associated with the tanks will be removed. The presence of contamination (asbestos, PCBs etc.) on piping and ancillary equipment will be based on physical observation and associated testing prior to removal. Piping and ancillary equipment with the presence of asbestos, PCB,s and other regulated materials will be wrapped in plastic and transported to the decontamination area for staging prior to appropriate off-site disposal in accordance with applicable rules and regulations. Prior to tank removals, all material from within the tanks will be removed and transported to the existing coal mixing pad for future re-use in the coke process as presented in section 3 of this plan. Following removal of all material from within the tanks, the tanks will be disassembled (i.e., cut) into manageable size pieces and transported to the decontamination facility for appropriate cleaning and/or offsite disposal. If determined that cleaning is not feasible (i.e., because of pervasive contamination), the tank pieces will be staged in the material storage area for appropriate off-site disposal.

Prior to removal of tanks T-1 and T-2, an assessment of the material within the tank systems will be conducted. Tank contents samples will be collected at five separate locations (center and four quadrants). The samples will be collected using a hand auger or appropriate sampling implement and composited into one sample per tank and submitted for laboratory analysis in accordance with the procedures presented in the EPA approved May 2010 Sampling and Analysis Plan.

The samples will be analyzed for total halogens and total PCBs by USEPA SW846 Method 8260 and 8082A, respectively. The results will be utilized to determine the management (i.e., re-use, off-site disposal, etc.) of the tank contents during the project. Detailed quality control data will not be provided in the summary report. However, all data will be validated by the laboratory.

2.7 Excavation of Residual Tar-Like Materials

Following removal of the tank systems, the contractor will excavate residual tar-like materials within the project limits (Figure 2 – Appendix A). The depth and limits of excavation will be determined in the field by the environmental professional and/or as directed by the New York State Department of Environmental Conservation (NYSDEC) on-site monitor. Excavation activities will continue until no visual evidence of residual tar-like material is present or to the depth of the clay sub-base, whichever comes first. Confirmation of successful removal of the residual material within the project area will be accomplished by visual examination only and confirmation/approval by the NYSDEC on-site monitor.

Dedicated on-site trucks and excavating equipment will be used for the area of excavation. The excavation and loading of excavated material will utilize "clean loading" procedures minimizing contact/impact with other areas. These procedures will ensure that the excavated materials are not spread to other areas including adjacent properties and roadways. Dedicated equipment (e.g. excavator, bulldozer, etc.) will be decontaminated prior to leaving the site. Decontamination will be performed at the designated on-site decontamination station in accordance with Section 2.8 of this plan.

A trackhoe, or equivalent, will be used for removing residual tar-like materials from the project area. Excavated materials will be directly loaded into a dump truck for transport to the coal mixing pad for future re-use in the coke process. Prior to exiting the project area, the truck exterior, wheels, and undercarriage will be inspected for the presence of coal tar. If necessary the dump trucks will be decontaminated to prevent the spreading of excavated materials to other areas of the site.

2.8 Decontamination Procedures

An equipment/personnel decontamination facility will be constructed at the site in the vicinity of the project area. The decontamination facility will be used for removal of residual materials from large equipment (excavator, loader, haul trucks, etc.) at the end of excavation activities upon leaving the project area. In addition, the facility will be used to decontaminate materials (i.e., tank pieces, piping, etc.) prior to off site disposal and/or salvage. The decontamination facility be constructed of an impervious lined floor (i.e., HDPE liner) and walls (i.e., plywood walls covered with 6 mil. Polyethylene sheeting) to provide appropriate secondary containment

of generate materials and wash waters. The facility will be equipped with a pressure washer or steam cleaner, sump and storage containers for wastewater. Wash waters will be collected in a sump area within the facility and transferred (i.e., pumped) to containers for appropriate characterization and off-site disposal.

To insure materials are appropriately managed, spill response procedures will be in place prior to the start of the project. Spill response procedures are included as Appendix G.

2.9 Field Documentation

All tank removal activities (i.e., tank cleaning, tank removal, residual material excavation, material staging, stock-piling and management, visual observations, waste disposal, etc.) will be documented in a field logbook or equivalent. At a minimum, the following information should be included in the field logbook:

- Project personnel;
- Date;
- Visual observation;
- Material management;
- Material/Waste Transported off site;
- Issues/Concerns;

This documentation will provide a detailed summary of the daily activities as well as an inventory of field sampling activities.

2.10 Worker Contamination Prevention

Generated materials will be managed to avoid the spread of residual materials from the site. Measures to do so are as follows. Additional measures are presented in the site specific Health & Safety Plan (Appendix E)

- Work practices will focus on keeping residual materials off of workers and their personal clothing by using appropriate protective clothing (i.e., Tyvek suits, latex booties, gloves, etc.).
- Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth contact is strictly prohibited within the construction and material staging areas.
- The hands and face must be thoroughly washed upon leaving the work area and prior to engaging in any activity indicated above.

- Personal protective equipment and clothing must be worn by all personnel entering restricted areas of the site.
- Contact with surfaces/materials either suspected or known to be contaminated will be avoided to minimize the potential for transfer to personnel, cross contamination and need for decontamination.
- Personnel and equipment in the contaminated area shall be minimized, consistent with effective site operations.
- All equipment leaving restricted areas will be visually inspected and decontaminated, as needed, to prevent the migration or contamination off-site.

PREPARED AT THE REQUEST
OF LEGAL COUNSEL

Section 3

GREAT LAKES ENVIRONMENTAL & SAFETY CONSULTANTS, INC.

Material Management

3.0 FINAL MATERIAL MANAGEMENT

3.1 General

This section summarizes procedures for the management of materials generated during the project. All generated materials will be properly managed to minimize environmental impacts and to comply with all applicable federal, state, local laws and regulations. These procedures, in conjunction with applicable non-hazardous and hazardous waste manifests, will accompany the material from its point of origin to its final destination. Appendix B presents a detailed summary of the materials to be managed off-site as part of this project as well as the corresponding management options and technologies.

3.2 Tank Contents and Excavated Materials

All tank contents and excavated residual materials generated from this project and deemed suitable for re-use in the coke process will be transported to the coal mixing pad for stockpiling. The materials will be staged on the pad for re-use in the coke process. It is anticipated that approximately 1,000 cubic yards of residual material will be generated as part of this project. Assuming a facility re-use rate of approximately 20 cubic yards per day, the material will be stockpiled on the mixing pad for approximately 50 days. The mixing pad is suitable for use in this process as documented in the Mixing Pad Evaluation report prepared by Great Lakes included as Appendix D of this work plan.

3.3 Material Segregation

All material other than tank contents and excavated residual material generated from this project will be transported to the material storage area for appropriate off-site management. In the material storage area, all generated material will be segregated based on its physical characteristics and anticipated final disposition (i.e., uncontaminated scrap, contaminated scrap, contaminated debris, etc.). The following is a list of material anticipated to be generated as part of this project and the proposed management (i.e., disposal, recycle, re-use).

1. Soil with Residual Tar-Like Material - Will be managed as hazardous waste (EPA Waste Codes K142 and/or K147).

2. Debris (rubble and brick, and pieces of steel) with Residual Tar-Like Material - Will be managed as as hazardous waste (EPA Waste Codes K142 and/or K147).

3. Water from Decontamination of Equipment - Will be managed as hazardous waste (EPA Waste Codes K142 and/or K147).
Modified to Treatment On-Site or at POTW.

4. Uncontaminated and/or Decontaminated Recyclable Steel - Recycling via scrap metal reclamation.

Based on visual observation and prior testing, it is not anticipated that any asbestos or PCB containing materials will be encountered. However, in the event that asbestos or PCB containing materials are encountered, they will be managed and disposed in accordance with all applicable rules and regulations.

3.4 Waste Transportation

All solid and liquid waste generated as part of this project (other than the tank contents and excavated residual material) will be transported off site by a permitted approved hauler, in accordance with the Department of Transportation (DOT) guidelines as outlined in 49 CFR Parts 171 through 179, 6 NYCRR Part 364, and any other applicable state and local regulations. Each shipment of solid or liquid waste generated from the project will be properly characterized, containerized, and manifested prior to exiting the site.

A non-hazardous bill of lading or hazardous manifest will be prepared and completed for each shipment of solid or liquid waste prior to exiting the site. The transporter must possess the signed non-hazardous bill of lading or hazardous waste manifest when transporting the waste material to the waste disposal facility. In addition, the transporter must have the proper labels and placards on the waste containers when transporting the waste materials off site. Once arriving at the waste disposal facility, the manifest must be given to the waste disposal facility as it accepts the waste material at their facility.

PREPARED AT THE REQUEST
OF LEGAL COUNSEL

Section 4

GREAT LAKES ENVIRONMENTAL & SAFETY CONSULTANTS, INC.

Final Report

4.0 SUMMARY REPORT

Upon completion of the project activities, a summary report will be prepared. At a minimum the summary report will include the following information:

- P.E. Certification: certification that the tank removal and associated remedial activities were performed in accordance with tank removal work plan;
- Introduction: a brief description of the site, the site's background and the purpose and organization of the report;
- pre-construction activities: will provide the details pertaining to the preparation of construction plans, mobilization and site preparation;
- Activities summary: will provide a summary of the activities in that were conducted (i.e., tank cleaning, tank removal, excavation, etc.);
- Post-excavation summary: will provide the details pertaining to the final grading and restoration of the excavated areas and the demobilization of the site; and
- Material management: a summary of the management of all materials generated as part of the project.

EXHIBIT B

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau E, 12th Floor
625 Broadway, Albany, New York 12233-7017
Phone: (518) 402-9814 • **Fax:** (518) 402-9819
Website: www.dec.ny.gov

Joe Martens
Commissioner

July 29, 2011

Mr. James K. Kay
Conestoga-Rovers & Associates
651 Colby Drive
Waterloo, Ontario
Canada B2V 1C2

RE: Tonawanda Coke Site, OU3, ID No. 915055

This is in response to your June 15, 2011 letter regarding the ditch remediation at Site 108, also referenced as operable unit (OU) 3.

1. Based on the observations made during the January 26, 2011 field trip with New York State Department of Environmental Conservation (NYSDEC) officials, and based on the proposal included in your June 15, 2011 letter, we agree with the proposal to construct a sedimentation basin to address the ditch sediment and discharge of cooling water from the plant. This proposal seems to include the monitoring of the basin to remove any sediment collection over time and minimal disturbance of the natural habitat. The proposal to place a pipe in the ditch to directly discharge the SPDES water will disturb the natural habitat which the Division of Fish &Wildlife has determined to be valuable.

2. During the sediment removal action if the water level is low as noticed during the January 2011 on-site meeting, the Contractor should implement all the available means and methods to remove as much contaminated sediment as possible from the embayment area.

3. The December 2010 Remedial Action (RA) Proposal notes that sediment is to be removed to a depth of 0.5 feet in Area 1 and 2.5 feet in Area 2. Please specify the method to measure the depth of removal in the field.

4. The RA proposal notes that quarried sand will be used as backfill. Detail should be provided as to the methods and/or procedures to be used to place this backfill.

5. The RA proposal notes that vegetation along the river bank will need to be removed to facilitate access. A replanting plan should be provided to re-establish this vegetation.

6. The RA proposal should note the requirements and time period for obtaining a USACE permit for performing the work in the Niagara River. It should be noted that such a permit will require a Water Quality Certification from DEC-DEP. In addition DEC-DEP will require a Protection of Waters permit for the work, both which may necessitate additional requirements for performing this work.

7. The RA proposal shall include a contingency plan to remove tar deposits encountered during the surface soil removal. As discussed previously, the surface soil removed shall be recycled at the plant as much as possible.

8. The RA proposal shall include a plan for tank removal specific for this area since this area is not the same as the plant areas (OU1 and OU2). This plan shall also include that additional work in the foundation areas shall be conducted for the presence of tar deposits. The tar deposits shall be removed if present and shall be recycled at the plant.

Please submit a work plan for the activities to be conducted at Site 108 (OU3) and include all the details specified in the above comments.

Sincerely,

Vivek Nattanmai, P.E.
Project Manager
Remedial Section C, Remedial Bureau E
Division of Environmental Remediation

ec: M. Forcucci, NYSDOH
J. White
G. Sutton
G. May
K. Roblee

EXHIBIT C

CONESTOGA-ROVERS & ASSOCIATES

651 Colby Drive, Waterloo, Ontario, Canada N2V 1C2
Telephone: 519-884-0510 Facsimile: 519-884-0525
www.CRAworld.com

September 26, 2011 Reference No. 002428

Mr. Vivek Nattanmai
New York State Department of Environmental Conservation
625 Broadway, 12th Floor
Albany, NY 12233 - 7017

Dear Mr. Nattanmai:

Re: Remediation Site 108
Tonawanda Coke Corporation

On June 15, 2011, Conestoga-Rovers & Associates submitted an update on the Site 108 ditch remediation on behalf of Tonawanda Coke Corporation (TCC). This update provided modifications to the December 10, 2010 Remedial Action Proposal based upon the observations made during the January 2011 site walkthrough conducted with the Fish & Wildlife Group of the New York State Department of Environmental Conservation's Buffalo office. On July 29, 2011, the New York State Department of Environmental Conservation (NYSDEC) provided comments on the ditch remediation plan. This letter responds to those comments.

Comment 1
No response necessary. All parties are in agreement that the current ecological setting along the ditch is superior to any that would exist if a sediment removal action were deployed through this area.

Comment 2
In the event that the sediment removal can be performed under dry conditions, as observed during the January 26, 2011 site walkthrough, the areal limits of sediment removal will be extended to include the additional removal of the upper 6 inches of sediment from around sample location SP-1. This is the only other surficial sediment deposit with slightly higher total semi-volatile organic compounds (SVOCs) that may be accessible if the river level is low. It is noted that including this area will result in the removal of an additional 22 pounds of SVOCs, which is equivalent to 2 percent of the chemical mass within the surveyed embayment area. As a result, removal of this material will not have a significant additional environmental benefit over and above the previously planned remedial scope. Nonetheless, it will be removed if it is not submerged.

Comment 3
The area from which sediment is to be removed will be regularly measured using a calibrated rod. The depth of water at a particular location will be compared just prior to and just after the excavation from that area to confirm that either 0.5 or 2.5 feet of sediment have been removed, as planned. In the event that the sediment can be removed when the area is dry, a simple set of

survey stakes will provide measurement points from which to confirm the depth of sediment removed.

Comment 4
The quarried sand will be placed back into the excavation using the simplest possible method. If the area is dry and will support the weight of equipment, a bulldozer will be used to spread the backfill material. In the event that the material has to be placed under submerged conditions, the excavator used to remove the sediment will be used to place the backfill material. The silt fence installed to protect the river will not be removed until after the backfilling is complete.

Comment 5
For every tree removed to allow access for equipment to remove the sediment, a 10-foot replacement tree of a similar species will be replanted upon conclusion of the remediation. Natural growth of shrubs and grasses will quickly revegetate any disturbed areas with native species. All sloped areas will be seeded with grass seed to initiate soil stabilization until the native species can re-establish themselves.

Comment 6
It is fully expected that an approval of this remediation plan from the NYSDEC incorporates an approval from all departments within the NYSDEC. If additional requirements are to be imposed by any department of the NYSDEC, please provide. Once NYSDEC approval of this remediation program has been provided, a meeting will be held with the United States Army Corps of Engineers to determine any permit requirements or operating restrictions that they may have.

Comment 7
Whether tar, coal, or coke are encountered during the surface soil removal program, they will be recycled at the plant. No contingency plan is necessary. Their removal has always been the intended plan.

Comment 8
It is suggested that TCC and NYSDEC continue to focus on the approval process for the ditch and embayment sediment and the surface soils on Site 108. The discussion on the dismantling of the tanks and additional work in the foundation areas has to await finalization of the Barrett Tank project. Given the fact that the groundwater discharging from Site 108 into the Niagara River contains no chemical mass associated with the tank farm, there is no reason to address these tanks in a different order from what is currently ongoing.

CONESTOGA-ROVERS & ASSOCIATES

September 26, 2011 Reference No. 002428

Summary Comment
With regard to the request to submit a Work Plan, there is no additional level of detail to be added to the previous submittals that would further enhance the understanding of the work to be performed. All of the remedial activities planned will be field fit to match the encountered conditions. Expectations are that a NYSDEC representative will be on site during the remedial activities to discuss specific details as they arise. Consequently, no additional Work Plan is anticipated to be needed and none is planned.

Should you have any additional questions or comments regarding the plan for remediation, please do not hesitate to call.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

James Kay

JK/lp/11

cc: Rick Kennedy
Mark Kamholz
Greg Sutton

EXHIBIT D

Kennedy, Rick

Subject: FW: NYSDEC Approval of Work Plan

From: Kay, Jim
Sent: Monday, October 31, 2011 11:01 AM
To: Rick Kennedy
Cc: Project Email Hold
Subject: NYSDEC Approval of Work Plan ~COR-002428~

Rick
I spoke with Vivek and confirmed that there is an "If" missing from his second comment, so we can recycle the coal, coke, and tar on-site as planned.

I will follow up on the Water Quality Certification and then arrange a meeting with the US Army Corp of Engineers

Jim

From: Vivek Nattanmai [mailto:vrnattan@gw.dec.state.ny.us]
Sent: Tuesday, October 04, 2011 11:23 AM
To: Kay, Jim
Cc: Joseph White; Gregory Sutton; Maura Desmond; Teresa Mucha
Subject: Tonawanda Coke Site, 915055

Hi Jim

We have reviewed your responses dated September 26,2011 to our July 29, 2011 comments on the proposal for the dredging of the contaminated sediments from the embayment area located at OU3 including surface soil removal and tank removal activities. We approve the proposal based on your responses.

Based on response 7 any coal, coke or tar encountered during the proposed activities they will be recycled at the plant. Please note that the recycling of these substances are found to be not feasible during the remedial activities they will be disposed appropriately.

Per the consent order you do not need to obtain a Protection of Waters Permit from DEC. But you need to obtain a Water Quality Certification from DEC as part of the Corps permit. You can call 716-851-7165 to obtain information about the certification. Let me know if you need any assistance with that.

If you have any questions please call or e-mail.

Thanks.

Vivek Nattanmai, P.E.
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233-7013

EXHIBIT E

Department of Environmental Conservation

Division of Environmental Remediation

Record of Decision

Tonawanda Coke Corporation Site
Operable Unit Nos. 1 and 2
Tonawanda, Erie County, New York
Site Number 9-15-055

March 2008

New York State Department of Environmental Conservation
DAVID PATERSON, *Governor* ALEXANDER GRANNIS, *Commissioner*

DECLARATION STATEMENT - RECORD OF DECISION

Tonawanda Coke Corporation Inactive Hazardous Waste Disposal Site
Operable Unit Nos. 1 and 2
Tonawanda, Erie County, New York
Site No. 915055

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for Operable Units 1 and 2 of the Tonawanda Coke Corporation site, a Class 2 inactive hazardous waste disposal site. The selected remedial program was chosen in accordance with the New York State Environmental Conservation Law and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for Operable Units 1 and 2 of the Tonawanda Coke Corporation inactive hazardous waste disposal site, and the public's input to the Proposed Remedial Action Plan (PRAP) presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

This site does not present a current or potential threat to public health or the environment.

Description of Selected Remedy

Based on the results of the Remedial Investigation and Feasibility Study (RI/FS) for the Tonawanda Coke Corporation site and the criteria identified for evaluation of alternatives, the Department has selected no action with the provision of Institutional/Engineering Controls. An environmental easement will be placed on the site. The following items will be part of the requirements:

1. Imposition of an institutional control in the form of an environmental easement that will require (a) limiting the use and development of the property to industrial uses; (b) evaluate the need for remediation of the site if the future use of the site is industrial but the manufacturing activities are different from the current coke production activities; (C) compliance with the approved site management plan; (d) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (e) the property owner to complete and submit to the Department a periodic certification of institutional and engineering controls.

2. Development of a site management plan which will include the following institutional and engineering controls: a) during any future development of the site, if soil was excavated at the site, the excavated soil will be tested, properly handled to protect the health and safety of workers and the nearby community, and will be properly managed in a manner acceptable to the Department; (b) monitoring of groundwater on a periodic basis; (c) identification of any use restrictions on the site; and (d) fencing to control site access.

3. The property owner will provide a periodic certification of institutional and engineering controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal will: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that will impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy selected for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective.

MAR 3 1 2008

Date

Dale A. Desnoyers, Director
Division of Environmental Remediation

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RECORD OF DECISION

Tonawanda Coke Corporation Site
Operable Unit Nos. 1 and 2
Tonawanda, Erie County, New York
Site No. 915055
March 2008

SECTION 1: SUMMARY OF THE RECORD OF DECISION

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the Tonawanda Coke Operable Units 1 (OU1), and OU2. As more fully described in Sections 3 and 5 of this document, the disposal and handling of industrial waste from the coke production activities at the site has contaminated soil, groundwater and sediment with semi-volatile organic compounds and metals that are related to coke production.

Based on the findings of the investigation the site does not pose a significant threat to the public health and the environment because site security and fencing make the site inaccessible to the public. The groundwater contamination at the site is insignificant and the surface water discharge from the site to the river is managed under an SPDES permit. Therefore, Institutional/Engineering Controls is selected as the remedy for the OU1 and OU2 of this site. An environmental easement will restrict the use of groundwater at the site as a potable water source, monitor the groundwater periodically to ensure that the contamination is not migrating away from the site and will include a soil management plan to address contaminated soil appropriately if there is a change in the use or current practices of the site in the future.

The selected remedy, discussed in detail in Section 6, is intended to attain the remediation goals identified for this site in Section 6. The remedy must conform to officially promulgated standards and criteria that are directly applicable, or that are relevant and appropriate. The selection of remedy must also take into consideration guidance, as appropriate. Standards, criteria and guidance are hereafter called as SCGs.

SECTION 2: SITE LOCATION AND DESCRIPTION

The site is located along and to the east of the eastern bank of the Niagara River within the Town of Tonawanda, Erie County, New York. The New York State Registry of Inactive Hazardous Waste Disposal Sites lists the three operable units and not the entire property of the Tonawanda Coke, as the site. The site is located about 0.25 miles west of I-190 on both sides of River road. The surrounding area is primarily industrial although a small residential cluster exists approximately 0.25 mile south of the plant. Refer to Figure 1 for the location of the site. Several listed hazardous waste disposal sites are located around this site. The Allied Chemical site is located to the south, Roblin Steel site is located across from the site to the west on River Road and the River Road site is located to the north of the site.

Operable Unit (OU) Nos. 1, and 2, which are the subject of this document, are referred to as Site 110 and 109 respectively. Please refer to Figure 2 that identifies all the OUs at the plant site. An operable unit represents a portion of the site remedy that for technical or administrative reasons can be addressed separately to eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination.

Materials such as coal tar sludge, fly ash and cinders were reportedly disposed at OU1 which is referred as Site 110. OU1 is located at the rear of the plant in the northeast corner of the area east of River Road. The disposal activities occurred prior to 1978.

In 1977, an unknown quantity of brick, rubble and related demolition waste was disposed in OU2, located adjacent to River Road. OU2 is located inside the fenced production facility and referred as Site 109.

Another operable unit OU3 at the site which is referred as Site 108 is located adjacent to the Niagara River. In 1973, the County Health Department granted permission to establish a disposal area west of River Road identified as OU3. This area was filled with refuse, wood, scrap polyethylene and ceramic saddle packing from refining equipment. The area covered by OU3 is currently a vacant parcel and no industrial activity is performed. The OU3 was used for transferring coal from the river to the production facility via conveyor belts. The OU3 along with the contaminated sediment in the river needs to be investigated to determine the extent of contamination and evaluated for remedial alternatives to address the contamination. This PRAP does not include OU3 and the contaminated river sediments which will be deferred for further evaluation and implementation of appropriate remedial action.

2.1: Site Geology and Hydrogeology

In general, the site slopes gently to the west towards the river. Surface water within the plant area is collected by a storm water collection system and directed to the SPDES permitted outfall west of the site. Fill material is present as the uppermost stratigraphic unit over the entire site and the thickness of this unit was found to vary from approximately 0.9 to 10 feet. The fill encountered during the investigation consisted mainly of silt, gravel, cinders, slag, coke and cinder. Underlying the fill material is a native galciolacustrine deposit. This unit is composed primarily of red-brown clay with some silt and gravel lenses. The thickness of this unit is unknown as the wells and test pits were completed in the fill unit and the boreholes extended only a few feet into the clay unit. Data from other investigations conducted at adjacent sites indicate that the clay stratum averages more than 50 feet in thickness.

Beneath the site, the fill strata contain the uppermost water-bearing unit. This unit is not continuous in depth due to the varying thickness of the fill material across the site. This unit is not suitable for use as a source of drinking water or other potable uses because it is a perched water condition in the subsurface that can not produce adequate groundwater for pumping. The underlying clay strata act as a significant aquitard to both horizontal and vertical groundwater movement. The bedrock is expected to be at least 50 feet below grade. Although the upper bedrock water-bearing unit is more extensive than the overburden water-bearing unit, the primary regional source of drinking water is the Niagara River.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

Manufacturing processes at the plant began in 1917 and included by-products coking; light oil distillation; ammonia recovery; and benzene, toluene, and xylene extraction. A few areas of the plant Site were used for the disposal of wastes. Materials such as tar sludge, fly ash and cinders may have been deposited at the rear of the plant (northeast corner of the area east of River Road, now referred to as Site 110) before 1978. An unknown quantity of brick, rubble, and related demolition wastes were also disposed in an area adjacent to and on the east side of River Road in 1977 (Site 109).

3.2: Remedial History

In 1990, the Department listed the site, comprising of three OUs, as a Class 2 site in the Registry of Inactive Hazardous Waste Disposal Sites in New York. A Class 2 site is a site where hazardous waste presents a significant threat to the public health or the environment and action is required.

In 1981, the Department collected sediment and surface water samples from the Tonawanda Coke drainage basin. In 1982 and 1983, the USGS collected soil, groundwater, and surface water samples from this site and a Phase II Investigation was completed by the responsible party.

Since 1982, five major investigations and several other sampling events have been conducted at the Site, focusing primarily on the three former on-Site disposal areas. In July 1982 and May 1983, the United States Geological Survey (USGS) undertook the sampling of a number of inactive hazardous waste disposal sites roughly within a 3-mile wide band along the Niagara River. This sampling program was part of an overall investigation of toxic contaminant entry into the Niagara River. The USGS program involved the collection of two groundwater samples, 10 soil samples and two surface water samples from the Site.

The results of the five subsequent major studies are presented in the following previously submitted reports:

1. "Tonawanda Coke Corporation, New York State Superfund Phase I Summary Report, Nov. 1983" prepared by Recra Research Inc. This study did not involve the collection of any samples for chemical analyses. The purpose of the study was to calculate a Hazard Ranking System Score for the Site based upon the previously obtained USGS sample results.

2. "Phase II Site Investigation, Tonawanda Coke Site, December 1986" prepared by Malcolm Pirnie Inc. The Phase II Site Investigation consisted of the following activities:
i) installation of seven overburden groundwater monitoring wells; ii) collection of 13 groundwater samples; iii) installation of 12 test pits; iv) collection of one composite soil sample from four of the 12 test pits; and v) collection of eight surface water samples.

3. "Supplemental Site Investigation, Tonawanda Coke Corporation, July 1990" prepared by Conestoga-Rovers & Associates. The Supplemental Site Investigation consisted of the following activities:
i) installation of 10 overburden groundwater monitoring wells; ii) collection of 32 groundwater samples;

iii) installation of eight test pits; iv) collection of four composite soil samples from the test pits; v) advancement of four boreholes; vi) collection of two composite samples from the boreholes; vii) collection of 21 surface water samples; and viii) collection of 10 sediment samples.

4. "Additional Site Investigation, Tonawanda Coke Corporation, November 1992" prepared by Conestoga-Rovers & Associates. The Additional Site Investigation consisted of the following activities: i) installation of three overburden groundwater monitoring wells; ii) collection of 10 groundwater samples; iii) installation of nine test pits; iv) collection of two samples from the test pits; v) advancement of one borehole; vi) collection of five surface water samples; and vii) collection of two sediment samples.

5. "Remedial Investigation, Summary Report, Tonawanda Coke Corporation, May 1997" Prepared by Conestoga-Rovers & Associates. The Summary Report assembled all of the available information from the previous investigations performed at the Site pertaining to groundwater, surface water, soils, and sediment and discussed their significance in regard to potential impact to human health and the environment.

Analytical results from these samplings and investigations indicated the presence of widespread contamination on the site and the necessity of an expanded Remedial Investigation/Feasibility Study.

SECTION 4: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The Department and the Tonawanda Coke Corporation entered into a Consent Order on September 5, 1997. The Order obligates the responsible parties to implement a remedial program. After the remedy is selected, the Department will direct the PRPs to implement the selected remedy under the existing Order on Consent.

SECTION 5: SITE CONTAMINATION

A remedial investigation/feasibility study (RI/FS) has been conducted to evaluate the alternatives for addressing the significant threats to human health and the environment.

5.1: Summary of the Remedial Investigation

The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The RI was conducted between July and August 2005. The field activities and findings of the investigation are described in the January 2008 Final Supplemental report.

5.1.1: Standards, Criteria, and Guidance (SCGs)

To determine whether the soil, groundwater, sediment and surface water contain contamination at levels of concern, data from the investigation were compared to the following SCGs:

- Groundwater, drinking water, and surface water SCGs are based on the Department's "Ambient Water Quality Standards and Guidance Values" and Part 5 of the New York State Sanitary Code.

- Soil SCGs are based on Department's Regulation 6 NYCRR Subpart 375-6- Remedial Program Soil Cleanup Objectives.

- Sediment SCGs are based on the Department's "Technical Guidance for Screening Contaminated Sediments."

Based on the investigation results and based on the existing use of the site and potential public health and environmental exposure routes, the OUs 1 and 2 of the site do not require remediation. The results of the investigation are summarized in Section 5.1.2. More complete information can be found in the RI report.

5.1.2: Nature and Extent of Contamination

This section describes the findings of the investigation for all environmental media that were investigated. As described in the RI report, many soil, groundwater, surface water, and sediment samples were collected to characterize the nature and extent of contamination. As summarized in Table 1, the main categories of contaminants that exceed their SCGs are volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and inorganics (metals). For comparison purposes, where applicable, SCGs are provided for each medium.

Chemical concentrations are reported in parts per billion (ppb) for water and parts per million (ppm) for soil and sediment.

Table 1 summarizes the degree of contamination for the contaminants of concern in soil, groundwater, surface water and sediment and compares the data with the SCGs for the site. Figure 3 shows the location of all the samples collected at the site between the years 1982 and 2005. The following are the media which were investigated and a summary of the findings of the investigation.

Operable unit 2 (site 109) is located downgradient of operable unit 1 (site 110).

Operable Unit 1 (Site 110)

SVOCs such as benzo(a)anthracene and benzo(a)pyrene were detected above SCGs in the surface soil samples collected in 2005. Benzo(a)pyrene which is a by-product from coke production and was detected between 6 to 21 ppm. The SCG for this compound is 1 ppm. No other SVOCs above SCGs were detected in the samples. VOCs and metals were not detected above the SCGs in these samples.

During previous investigations, soils samples from several soil borings and test pits were obtained for chemical analyses. No SVOCs, VOCs or metals were detected above the SCGs in these samples.

Several monitoring wells were installed on and off site. Cyanide was consistently detected above the groundwater standards in wells MW-2, 3 and 3R. MW-13 detected the highest concentration at 2750 ppb and the SCG for cyanide is 200 ppb.

Historically, the groundwater data in the vicinity of well MW-3 (later replaced with well MW-3R) had exhibited elevated concentrations of some of the VOCs, SVOCs, metals, and cyanide. The VOC exceedances (1,1,1-trichloroethane and benzene) were detected at concentrations only marginally greater than the SCGs. The SVOC exceedances at MW-3 included naphthalene, fluorene, phenanthrene, dibenzofuran, benzo(b)fluoranthene, and benzo(k)fluoranthene. The naphthalene, fluorene, and phenanthrene concentrations were within the same order of magnitude as the most stringent criteria. The metals exceedances included cyanide, aluminum, iron, manganese, and sodium, all of which were about an order of magnitude greater than the SCG.

As a result of these exceedances, it was decided to perform an excavation in the area of MW-3R to assess the soil conditions in this area. In August 2005, a backhoe was used to excavate a trench approximately 90 feet long and 6 feet deep running parallel to the railway tracks in the vicinity of MW-3R. The excavated material was carefully observed and a small amount of coal tar was found to be present. The coal tar was separated from the excavated material for reprocessing through the coking operation.

In addition, the monitoring wells located downgradient of MW-3 did not detect any contamination above the SCGs. The contamination found at MW-3 and 3R, therefore, appeared to be localized.

The five surface water samples collected during the 1992 investigation had shown that none of the VOCs were detected except for acetone which was detected in one sample. No SVOCs were detected at concentrations greater than the SCGs. Iron, manganese, and cyanide were present in the surface water samples at concentrations that exceed the SCGs.

Operable Unit 2 (Site 109)

No SVOCs, VOCs or metals were detected above the SCGs in subsurface soil samples collected from soil borings during previous investigations. Several test pits were excavated during previous investigations but no soil samples were obtained from these pits because visual observation of the excavated areas did not reveal the presence of any coal tar materials or other visible indication of gross contamination.

SVOCs such as benzo(a)anthracene and benzo(a)pyrene were detected above SCGs in the surface soil samples collected in 2005. Benzo(a)pyrene which is a by-product from coke production and was detected in 4 of the five samples and the range was between 0.74 and 53 ppm. The SCG for this compound is 1 ppm. No other SVOCs above SCGs were detected in the samples. VOCs and metals were not detected above the SCGs in these samples.

Several monitoring wells were installed on and off site. Cyanide was detected below the groundwater standard of 200 ppb in the samples except MW-17, which exceeded the groundwater standard at 270 ppb of cyanide. No SVOCs were detected above SCGs except for chrysene which was detected at 88 ppb and the SCG is 0.002 ppb. Except for benzene no other VOCs were detected above SCGs. Benzene was detected at 3.76 ppb at MW-16 and the SCG is 1 ppb.

Surface Water and Sediment for all the OUs

Surface water samples were collected in areas where ponding of water existed and in areas observed during the field work as the potential surface water drainage pattern at the Tonawanda Coke site. No SVOCs were detected above SCGs. VOCs such as benzene, methylene chloride and toluene were detected above SCGs at three locations that are located adjacent to Allied Chemical site. The highest concentration of benzene detected was 6.9 ppb (SCG is 1 ppb), methylene chloride was 13 ppb (SCG is 5 ppb) and toluene was 52 ppb (SCG is 5 ppb).

Sediments samples were collected from selected surface water sampling locations. Since these locations are dry most of the year and surface water is present only during precipitation events, the sediment sample results are compared to soil clean up SCGs. NO SVOCs, VOCs or metals were detected above the SCGs.

5.3: Summary of Human Exposure Pathways:

This section describes the types of human exposures that may present added health risks to persons at or around the site. An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five elements: [1] a contaminant source, [2] contaminant release and transport mechanisms, [3] a point of exposure, [4] a route of exposure, and [5] a receptor population.

The source of contamination is the location where contaminants were released to the environment (any waste disposal area or point of discharge). Contaminant release and transport mechanisms carry contaminants from the source to a point where people may be exposed. The exposure point is a location where actual or potential human contact with a contaminated medium may occur. The route of exposure is the manner in which a contaminant actually enters or contacts the body (e.g., ingestion, inhalation, or direct contact). The receptor population is the people who are, or may be, exposed to contaminants at a point of exposure.

An exposure pathway is complete when all five elements of an exposure pathway exist. An exposure pathway is considered a potential pathway when one or more of the elements currently does not exist, but could in the future.

Tonawanda Coke is an active Coke production facility. Industrial waste from their coke facility was disposed in two areas which have resulted in contamination of soil, groundwater and sediment with semi-volatile organic compounds and metals that are related to coke production. Under current use the site is not accessible to the public with fencing and 24 hour security. There could be potential for exposure to contaminated soils and sediments via incidental ingestion or dermal contact should trespassing occur. There could also be the potential exposure by incidental ingestion or dermal contact with residual contaminated soil and groundwater for workers who work in soils onsite and who work on utility lines.

Exposure to contaminated groundwater via drinking water ingestion is not expected because public water serves the area.

5.4: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts include existing and potential future exposure pathways to fish and wildlife receptors, as well as damage to natural resources such as aquifers and wetlands.

The following environmental exposure pathways and ecological risks have been identified:

As has been the case in each inspection, it is difficult to find surface water in the area. In this case, no standing surface water was present. In addition, the entire low lying area located along the eastern boundary of the Site is overgrown with phragmites. The extensive growth of phragmites is not a desirable habitat for either animals or birds. The wetlands to the south of Site 110 experience significant periods of intermittent dry cycles. The vegetative material in the wetland and the conditions make the wetlands of limited value. The wetland may be acting as a biofilter and removing some of the contaminants from surface water before it reaches the Niagara River. This may one of the wetland's most significant values.

The river sediments had significant concentration of SVOCs such as benzo(a)pyrene, benzo(a)anthracene, benzo(a)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene and pyrene were detected above the SCGs. The contamination of the river sediments along with OU3 will be addressed in the future by conducting additional investigation to further define the area of contamination and evaluate appropriate remedial action to address the contamination.

The groundwater at the site is contaminated with site-related chemicals but the contamination marginally exceeds the SCGs and therefore does not warrant remediation. The uppermost water-bearing unit located beneath the site in the fill strata is neither extensive nor continuous in depth due to the varying thickness of the fill material across the site. This unit is not suitable for use as a source of drinking water or other potable uses. The underlying clay strata act as a significant aquitard to both horizontal and vertical groundwater movement.

SECTION 6: SUMMARY OF THE REMEDIATION GOALS AND SELECTED REMEDY

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. At a minimum, the remedy selected must eliminate or mitigate all significant threats to public health and/or the environment presented by the hazardous wastes disposed at the site through the proper application of scientific and engineering principles.

Remediation goals are not applied to the use of materials currently handled in the active operations at the site. However, the groundwater sampling plan and the required permits would monitor whether the contamination from the site is migrating off-site. The investigations conducted at the site indicate contamination in surface soils, groundwater and river sediment. The primary contaminants found at the site are SVOCs such as benzo(a)pyrene, benzo(a)anthracene, benzo(a)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene and pyrene. These contaminants are common derivatives from coke production activities which are currently being conducted at the site.

The groundwater contamination at the site is found to be marginally exceeding the groundwater standards and therefore do not require any remedial efforts. The groundwater is not used for potable purposes in this area and the municipal water supply is readily available.

Several remedial alternatives such as No Action, Institutional Control, Capping with Institutional Control and Excavation with Off-Site Disposal and Institutional Control were evaluated for the remediation of contaminated soil in the Feasibility Study (FS) report. Since the site is an active industrial facility, the potential exposure issues associated with the chemicals found on the Site are minimal, the Site is zoned Industrial and is expected to remain as such and the site is secured with twenty four hour security and therefore, the Institutional Control is selected as the remedial alternative in the FS report.

As stated in the FS report remediation of contaminated soil is not warranted at the site because public access to the site is restricted with security and permanent fence around the site. Only authorized people can obtain access to the site. These measures eliminate the potential for the public to come in contact with the contaminated soil at the site.

The clean up goals for the contaminants found in soil are compared with clean up goals for the unrestricted future use of the site for consistency. Since the site is currently zoned as industrial and as indicated previously the site is currently an active manufacturing facility and will remain industrial for the foreseeable future, cleanup goals for restricted industrial will be used to compare the concentration of contaminants found in soil at the site.

Based on the above information, the Department selected no action with the provision of Institutional/Engineering Controls as the remedy for the OU1 and OU2. An environmental easement will be placed on the site. The total estimated present worth cost of the remedy is $227,100 which includes capital cost $14,500 and operation and maintenance cost $212,600. The following items will be part of the requirements:

1. Imposition of an institutional control in the form of an environmental easement that will require (a) limiting the use and development of the property to industrial uses; (b) evaluate the need for remediation of the site if the future use of the site is industrial but the manufacturing activities are different from the current coke production activities; (C) compliance with the approved site management plan; (d) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (e) the property owner to complete and submit to the Department a periodic certification of institutional and engineering controls.

2. Development of a site management plan which will include the following institutional and engineering controls: a) during any future development of the site, if soil was excavated at the site, the excavated soil will be tested, properly handled to protect the health and safety of workers and the nearby community, and will be properly managed in a manner acceptable to the Department; (b) monitoring of groundwater on a periodic basis; (c) identification of any use restrictions on the site; and (d) fencing to control site access.

3. The property owner will provide a periodic certification of institutional and engineering controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal will: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that would impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

SECTION 7: HIGHLIGHTS OF COMMUNITY PARITICIPATION

As part of the remedial investigation process, a number of Citizen Participation activities were undertaken to inform and educate the public about conditions at the site and the potential remedial alternative. The following public participation activities were conducted for the site:

- Repositories for documents pertaining to the site were established.
- A public contact list, which included nearby property owners, elected officials, local media and other interested parties, was established.
- A public meeting was held on March 18, 2008 to present and receive comment on the PRAP.
- A responsiveness summary (Appendix A) was prepared to address the comments received during the public comment period for the PRAP.

TABLE 1
Nature and Extent of Contamination
Operable Unit #1 (Site 110)

Surface Soil Sampling Dates: August 2005

SURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] (ppm)[a]	Frequency of Exceeding SCG
Semivolatile Organic Compunds (SVOCs)	Benzo(a)Pyrene	6 - 21	1	5 of 5
	Benzo(a)anthracene	6.4 - 20	1	3 of 5

Subsurface Soil Sampling Dates: July 1982 thru June 1991

SUBSURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] (ppm)[a]	Frequency of Exceeding SCG
VOCs, SVOCs or Inorganic compounds	Out of the five (5) samples obtained, none of the samples detected contaminants above SCGs			

Groundwater Sampling Dates: November 1985 thru August 2005

GROUNDWATER	Contaminants of Concern	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)[a]	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	Benzene	2.08 - 84	1	5 of 15
	Toluene	ND - 59	5	2 of 15
	1,1,1-Trichloroethane	ND – 12.2	5	4 of 15
Semivolatile Organic Compounds (SVOCs)	Benzo(a)Pyrene	ND - 95	ND	2 of 15
	Chrysene	ND – 9.0	ND	1 of 15
	Pyrene	ND - 302	50	3 of 15
	Fluoranthene	ND - 400	50	2 of 15
	Acenaphthylene	ND - 450	20	2 of 15
Inorganic Compounds	Cyanide	ND - 2750	200	11 of 15

TABLE 1
Nature and Extent of Contamination (continued)
Operable Unit #2 (Site 109)

Surface Soil Sampling Dates: August 2005

SURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] (ppm)[a]	Frequency of Exceeding SCG
Semivolatile Organic Compounds (SVOCs)	Benzo(a)Pyrene	0.74 - 53	1	4 of 5
	Benzo(a)anthracene	6 - 490	1	1 of 5

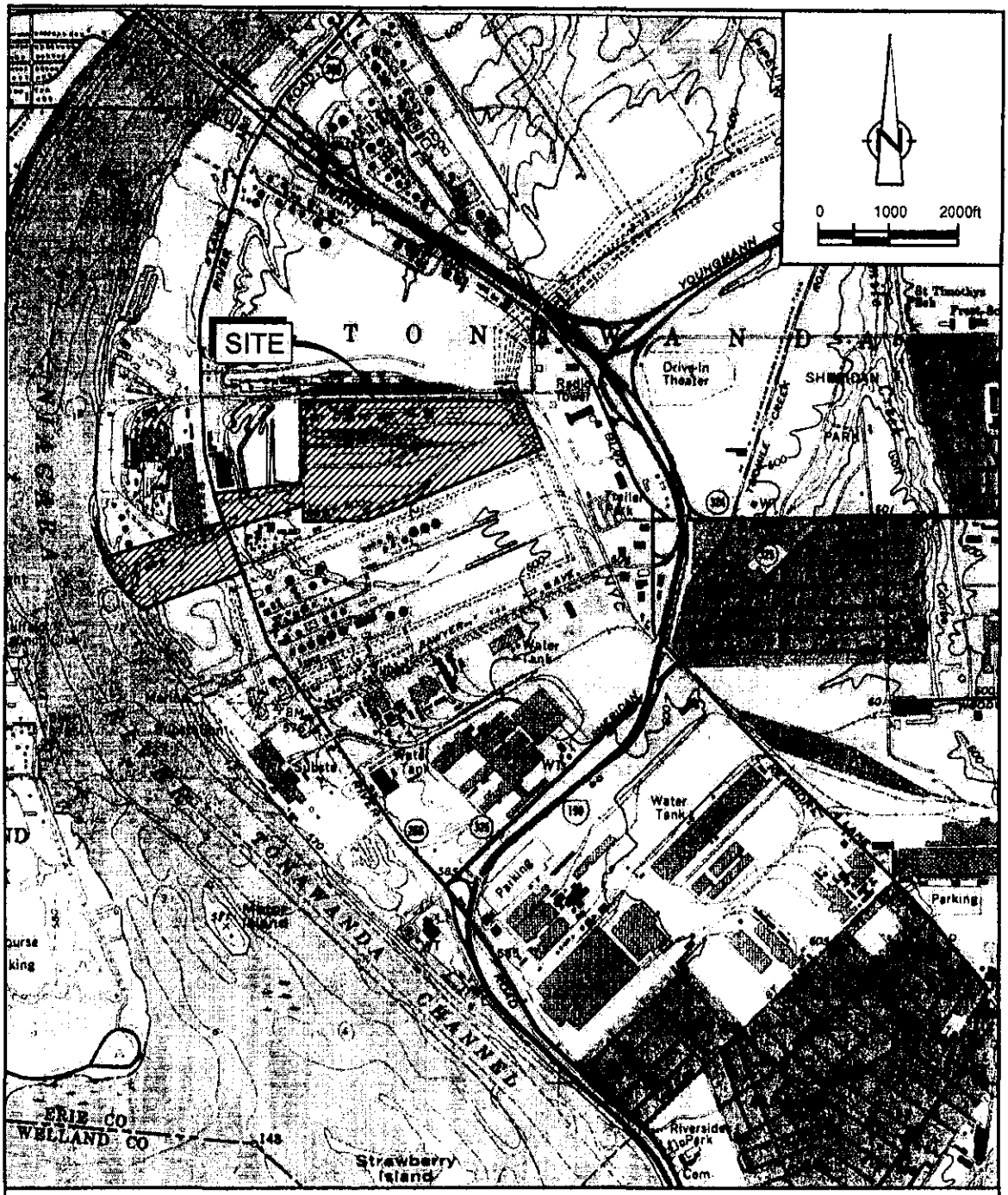
Subsurface Soil Sampling Dates: July 1982 – June 1991

SUBSURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] (ppm)[a]	Frequency of Exceeding SCG
VOCs, SVOCs or Inorganic compounds	Out of the three (3) samples obtained, none of the samples detected contaminants above SCGs			

Groundwater Sampling Dates: November 1985 – August 2005

GROUNDWATER	Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] (ppb)[a]	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	Benzene	ND – 3.76	1	1 of 15
Semivolatile Organic Compunds (SVOCs)	Chrysene	ND – 88	ND	1 of 15
Inorganic Compounds	Cyanide	ND – 270	200	1 of 15

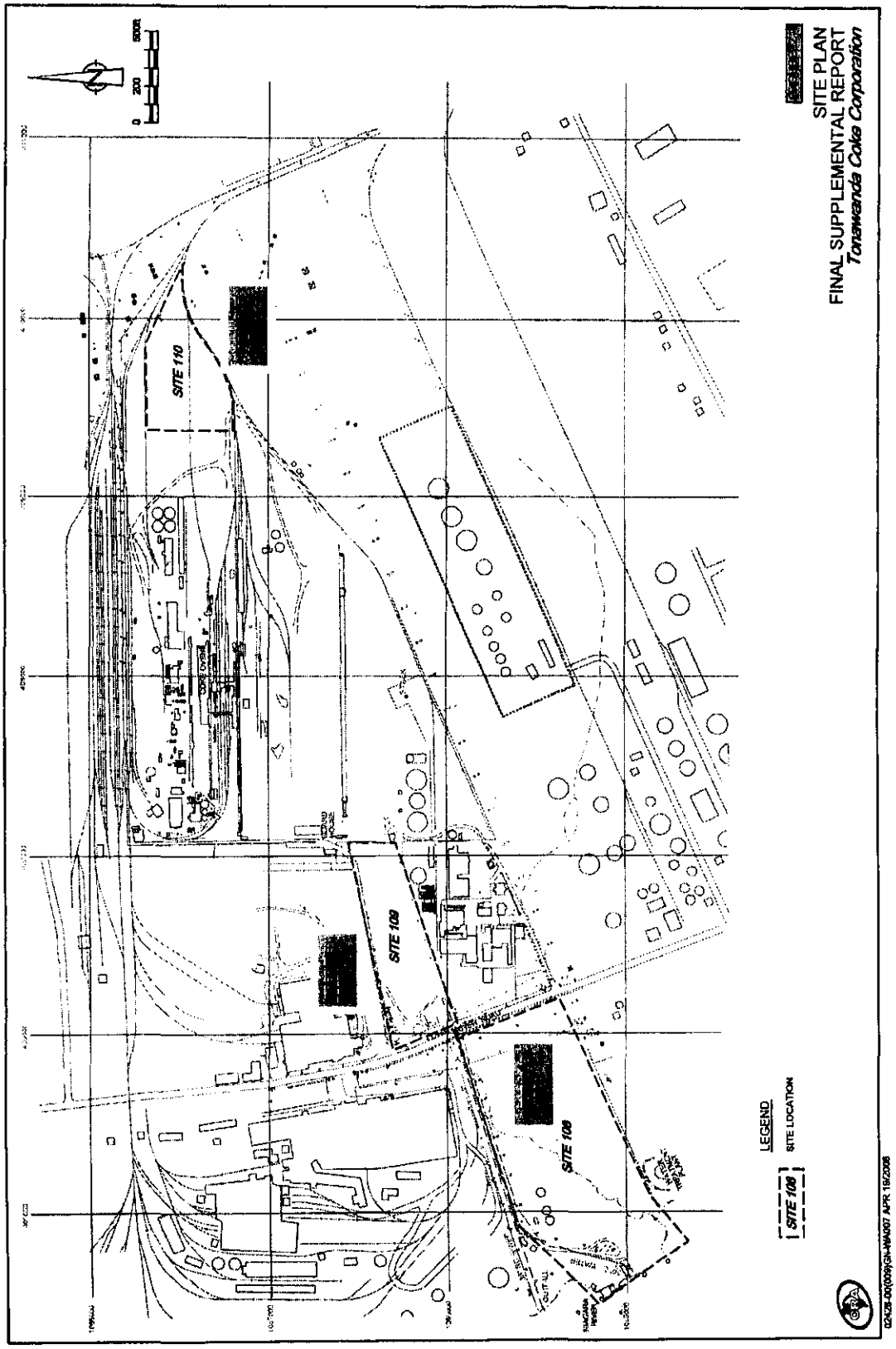
[a] ppb = parts per billion, which is equivalent to micrograms per liter, ug/L, in water;
ppm = parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
ug/m^3 = micrograms per cubic meter
ND = non-detect
[b] SCG = standards, criteria, and guidance values



SOURCE: USGS QUADRANGLE MAP;
BUFFALO NW, NEW YORK

SITE LOCATION
FINAL SUPPLEMENTAL REPORT
Tonawanda Coke Corporation

02428-00(009)GN-WA006 APR 19/2006


SITE PLAN
FINAL SUPPLEMENTAL REPORT
Tonawanda Coke Corporation
SITE 110
SITE 109
SITE 108
LEGEND
SITE 108
SITE LOCATION
0 200 400
N

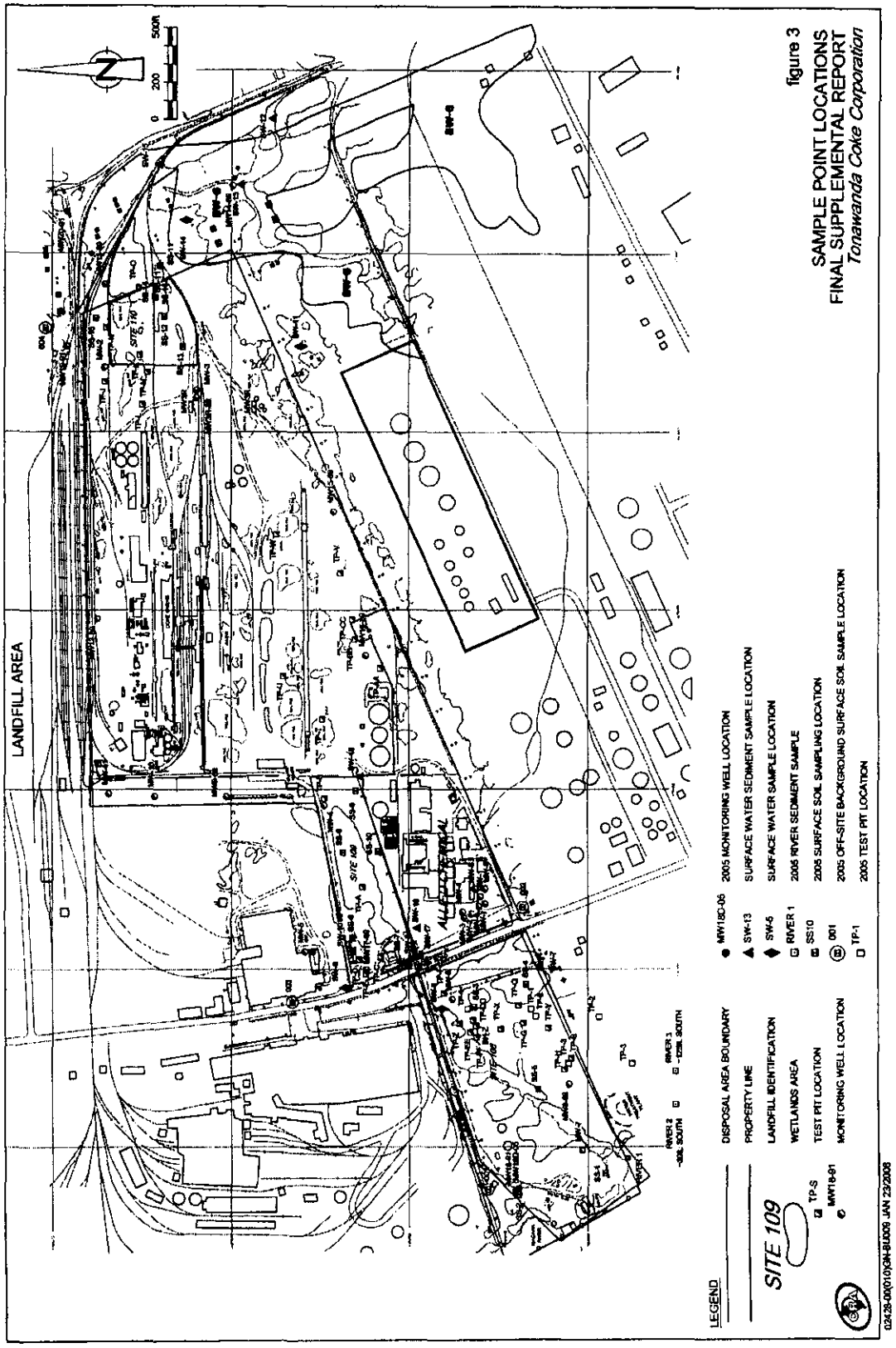


figure 3
SAMPLE POINT LOCATIONS
FINAL SUPPLEMENTAL REPORT
Tonawanda Coke Corporation

APPENDIX A

Responsiveness Summary

APPENDIX A

RESPONSIVENESS SUMMARY

Tonawanda Coke Corporation
Operable Unit Nos. 1 and 2
Tonawanda, Erie County, New York
Site No. 915055

The Proposed Remedial Action Plan (PRAP) for the Tonawanda Coke Corporation site, was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on February 29, 2008. The PRAP outlined the remedial measure proposed for the operable units 1 and 2 at the Tonawanda Coke Corporation site.

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on March 18, 2008, which included a presentation of the Remedial Investigation (RI) and the Feasibility Study (FS) as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on March 30, 2008.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

COMMENT 1:

What media is contaminated? What is the nature and extent of contamination?

RESPONSE 1:

The soil and groundwater are contaminated at Operable Units (OU) 1 and 2.

Semi-volatile organic compounds (SVOCs) such as benzo(a)anthracene and benzo(a)pyrene were detected above standards, criteria and guidance (SCGs) in the surface soil. No other SVOCs above SCGs were detected in the samples. Volatile organic compounds (VOCs) and metals were not detected above the SCGs in these samples. The contamination in surface soils was not widespread but sporadic and is attributable to the current coke production activities at the site.

The contamination detected in groundwater sampled at the site was marginally exceeding the groundwater standards and does not require remediation.

No SVOCs, VOCs or metals were detected above the SCGs in subsurface soil samples.

The analytical results from the surface water samples show that no VOCs were detected. No SVOCs were detected at concentrations greater than the SCGs. Iron, manganese, and cyanide were present in the surface water samples at concentrations that exceed the SCGs.

COMMENT 2:

Was testing conducted off the property around the perimeters of the operable units?

RESPONSE 2:

The investigation was conducted both inside the area of the operable units and outside the operable units. Please refer to Figure 3 of the ROD for the location of soil, groundwater, surface water and sediment sampling locations.

COMMENT 3:

Is there a map showing the levels of contaminants?

RESPONSE 3:

Yes. Please refer to Table 1 of the ROD that lists all the contaminants that exceeded the SCGs. In addition, Figures (Plans) 1 thru 5 included in the January 2008 Final Supplemental Report include contaminant levels. This report is available for review at the following locations:

Town of Tonawanda Public Library - Kenmore Branch
160 Delaware Rd
Kenmore, NY 14217 Phone: (716) 873-2842

Glenn May, NYSDEC
270 Michigan Avenue
Buffalo, NY 14203-2915 Phone: (716) 851-7220 **BY APPOINTMENT ONLY**

Vivek Nattanmai, P.E., NYSDEC
625 Broadway
Albany, NY 12233-7013 Phone: Toll Free 1-888-459-8667
****BY APPOINTMENT ONLY****

COMMENT 4:

Is there anything the Town of Tonawanda should be concerned about?

RESPONSE 4:

Since the Operable Units 1 and 2 are located inside the current coke production facility and the access into the facility can be obtained for authorized people only, there are no environmental and health concerns from these OUs to the Town.

COMMENT 5:

Is there a fence around OU3?

RESPONSE 5:

Yes. There is a permanent metal fence around the OU3.

APPENDIX B

Administrative Record

Administrative Record

Tonawanda Coke Corporation
Operable Unit Nos. 1 and 2
Site No. 915055

1. "Tonawanda Coke Corporation, New York State Superfund Phase I Summary Report, Nov. 1983" prepared by Recra Research Inc.

2. "Phase II Site Investigation, Tonawanda Coke Site, December 1986" prepared by Malcolm Pirnie Inc.

3. "Supplemental Site Investigation, Tonawanda Coke Corporation, July 1990" prepared by Conestoga-Rovers & Associates.

4. "Additional Site Investigation, Tonawanda Coke Corporation, November 1992" prepared by Conestoga-Rovers & Associates.

5. "Remedial Investigation, Summary Report, Tonawanda Coke Corporation, May 1997" Prepared by Conestoga-Rovers & Associates.

6. The Department and the Tonawanda Coke Corporation entered into a Consent Order on September 5, 1997.

7. "Final Supplemental Report (Revision 1) and Feasibility Study Report, January 2008" Prepared by Conestoga-Rovers & Associates.

8. Proposed Remedial Action Plan, February 2008, prepared by the Department.